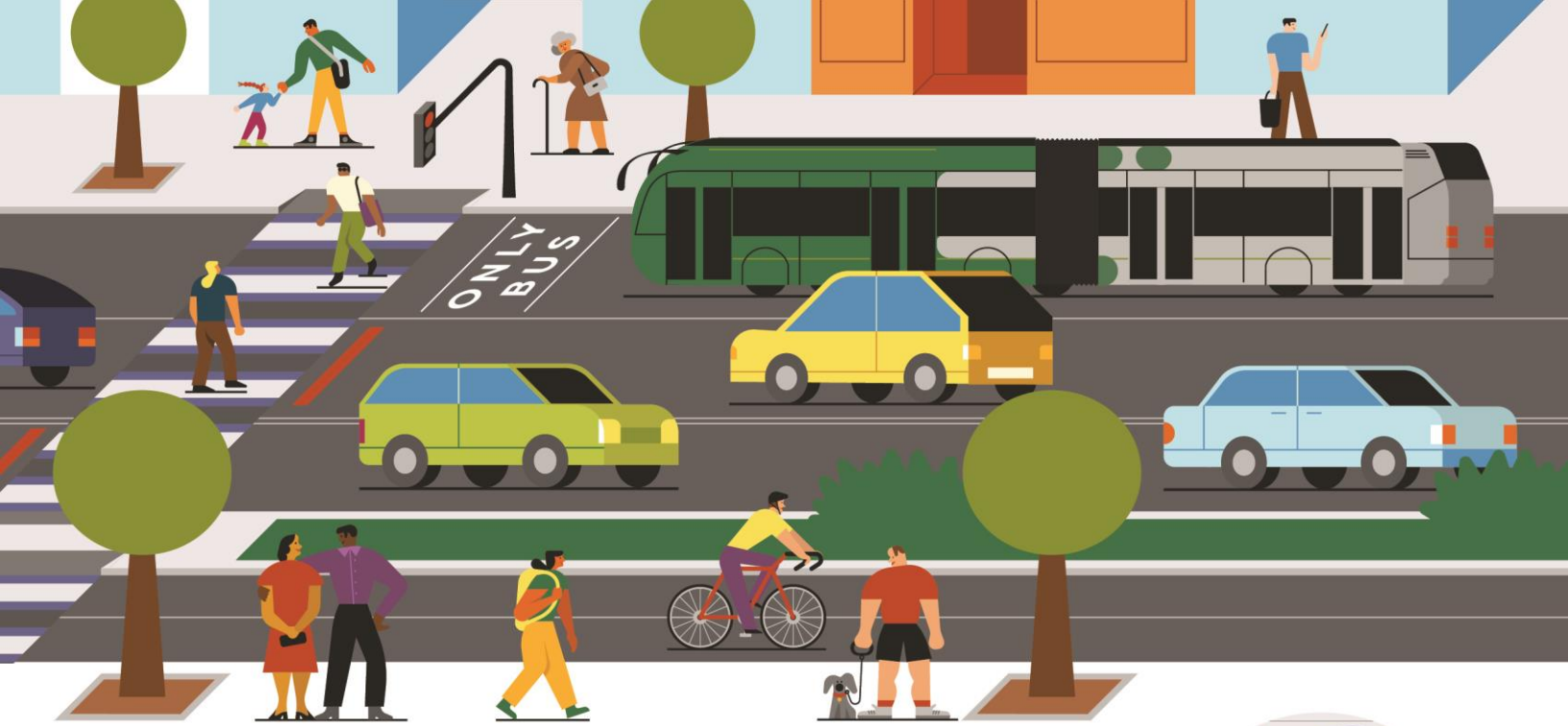







TRAFFIC OPERATIONAL ANALYSIS REPORT

ADVANCED RAPID TRANSIT (ART) EAST/WEST CORRIDOR PROJECT

July 11, 2025

VIA RAPID

ACRONYMS

Acronym/Abbreviation	Definition
AAMPO	Alamo Area Metropolitan Planning Organization
ART	Advanced Rapid Transit
BAT	Business Access and Transit (BRT) Lanes
BRT	Bus Rapid Transit
CRIS	Crash Record Information System
E/W	East/West
EBL	Eastbound Left
EBR	Eastbound Right
FHWA	Federal Highway Administration
HCM	Highway Capacity Manual
LOS	Level of Service
N/S	North/South
PL	Place
SAMM	San Antonio Multimodal Model
SAT	San Antonio International Airport
TxDOT	Texas Department of Transportation
VIA	VIA Metropolitan Transit Authority
WBL	Westbound Left
WBR	Westbound Right

EXECUTIVE SUMMARY

This technical report provides the results of a traffic analysis that assessed the potential effects on traffic operations along VIA's identified East/West (E/W) Corridor, part of VIA's Advanced Rapid Transit (ART) network, scheduled to begin operations in late 2029 to 2030. The primary purpose of the traffic analysis is to study the feasibility of dedicated transit lanes within the existing right-of-way along with turn lane requirements and the potential for delay at signalized intersections. To evaluate the traffic impacts of the ART E/W Corridor Project during the AM and PM peak hours of a weekday for Year 2029, a traffic operation analysis was performed using Synchro. A VISSIM model was also developed to aid in design decisions (e.g. left turn storage) at key intersections.

Based on the delay experienced by vehicles at a signalized intersection, a Level of Service (LOS) is assigned to represent the existing or anticipated quality of service experienced by drivers during the peak travel hours. LOS A represents the best operating conditions during analysis periods, and LOS F represents the worst conditions. Per the Texas Department of Transportation (TxDOT) Roadway Design Manual, heavily developed urban areas may necessitate the use of LOS D for the design. LOS E, which represents near capacity and when congestion is imminent during busier times of the day/year, is typically accepted for multimodal projects.

This analysis solely focuses on vehicle operations. The existing roadway geometry without the ART E/W Corridor Project is referred to as No Build in this memorandum, and the roadway geometry with the ART E/W Corridor Project is referred to as Build. A summary of the results is as follows:

2029 AM Peak (Opening Year)

- Without the ART E/W Corridor Project (No Build):
  - all signalized intersections are expected to operate at LOS D or better, and
  - no signalized intersections are expected to operate at LOS E or F.
- With the ART E/W Corridor Project (Build):
  - all signalized intersections are expected to operate at LOS D or better, and
  - no signalized intersections are expected to operate at LOS E or F.
- This analysis suggests that during the AM Peak, the ART E/W Corridor Project has no significant impact on traffic operations when compared with No Build.

2029 PM Peak (Opening Year)

- Without the ART E/W Corridor Project (No Build):
  - all signalized intersections are expected to operate at LOS D or better, and
  - no signalized intersections are expected to operate at LOS E or F.
- With the ART E/W Corridor Project (Build):
  - 56 signalized intersections are expected to operate at LOS D or better,
  - 2 signalized intersections are expected to operate at LOS E, and
  - no signalized intersections are expected to operate at LOS F.
- This analysis suggests that during the PM Peak, the ART E/W Corridor Project has no significant impact on traffic operations when compared with No Build.

The results of the traffic analysis suggest that the ART E/W Corridor Project contributes to an additional 8.7% and 14.2% increase in delay, translating to less than 1.1 seconds and 2.0 seconds on average per vehicle during AM and PM peak periods, respectively. Overall, the impact of the ART E/W Corridor Project on expected delays in the Open Year (2029) is expected to be minimal and would not result in a noticeable degradation of the average LOS along the study area.

The ART East/West Corridor Project also proposes constructing medians along Commerce Street, from General McMullen Drive to 21st Street. These medians will separate eastbound and westbound transit lanes, similar to the configuration planned for San Pedro Avenue under the ART North/South Corridor Project. The center-running median will eliminate permissive left-turn movements, replacing them with protected-only left turns. This change is expected to enhance safety.

To quantify the anticipated safety improvements, crash data from TxDOT's Crash Record Information System (CRIS) was analyzed for the five-year period between 2019 and 2023. The objective was to identify crashes involving left-turning vehicles that could potentially be reduced through access management and turn restrictions introduced by the proposed median. Based on this analysis, the center-running median is projected to reduce crashes by approximately 15%.

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1. INTRODUCTION

VIA Metropolitan Transit Authority (VIA) adopted its long-range plan, Vision 2040, in 2016. The plan identified ideal corridors within the VIA service area for high-capacity transit service.

Between 2017 and 2018, VIA completed a planning and alternatives analysis that led to the development of a proposed Rapid Transit Network (Rapid Transit Network Plan, October 2018). This network, locally known as Advanced Rapid Transit (ART), applies Bus Rapid Transit characteristics such as dedicated transit lanes and transit signal priority to improve transit travel time and reliability. The culmination of that effort led to the identification and prioritization of four merged corridors for rapid transit investment, including the ART North/South (N/S) and East/West (E/W) Corridors. The ART N/S Corridor was determined to advance first, followed by the ART E/W Corridor.

This memorandum summarizes the traffic analysis that was completed to understand the impact of implementing the ART E/W Corridor Project. The analysis was performed using the macroscopic analysis and optimization software, Synchro, for the Existing base year 2019 as well as the No Build and Build scenarios for the original opening year 2029.

Intersection LOS for planning and concept acceptance used the Highway Capacity LOS methodology from Synchro software. A microsimulation using VISSIM was also performed to optimize intersection operations, determine turn lane lengths, and mitigate queuing. A detailed description is provided in Section 5.2.1.

1.1 Study Area

From west to east, the ART E/W Corridor begins at General McMullen Drive following Commerce Street to the east. Shortly after passing 22nd Street, the corridor splits into Commerce Street and Buena Vista Street as parallel one-way routes with Buena Vista Street (which transitions into Dolorosa Street near I-10/I-35 and Market Street near Main Plaza) carrying eastbound traffic and Commerce Street carrying westbound traffic. The ART E/W Corridor reconnects as a two-way facility at Tower of the Americas Way, just west of I-37. The corridor follows Commerce Street east before turning north at Cherry Street. The ART E/W Corridor resumes its east/west orientation after turning east at Houston Street. The corridor follows Houston Street terminates just prior to Coca Cola Place along Houston Street.

Figure 1-1 shows an overview of the ART E/W Corridor. The ART East/West Corridor spans approximately 7.3 miles and includes 18 station areas, intersecting with 58 signalized intersections under the Build 2029 conditions. Synchro analysis was conducted for the intersections listed in Table 1-1.

Operationally, ART service is currently planned to run at 10- to 15-minute headways. As shown in Table 1-1, the intersections of Rosillo Street at Commerce Street and Buena Vista Street are signalized only in the Build 2029 models. Additionally, the intersection of Buena Vista Street at Leona Street is signalized in both the No Build and Build 2029 models.

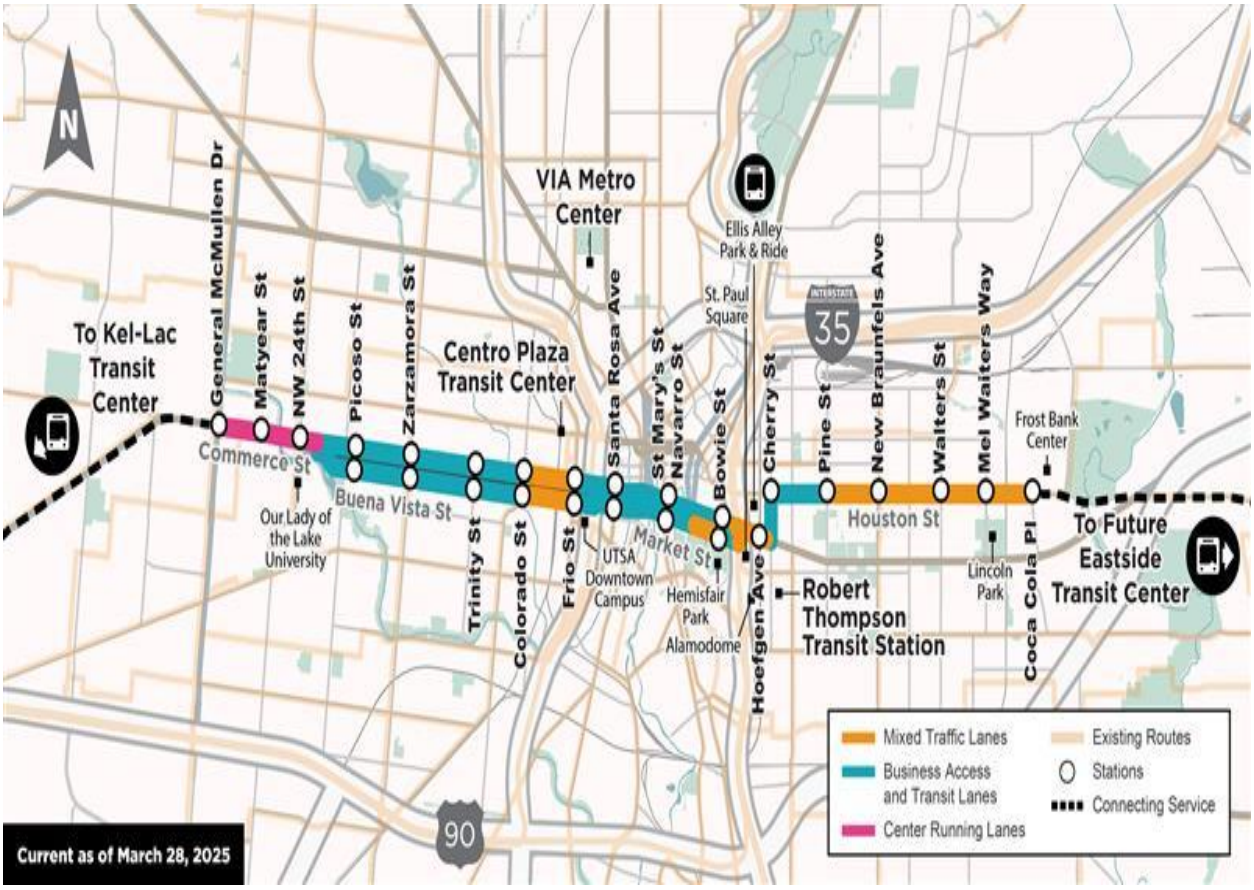


Figure 1-1 ART East/West Corridor

Table 1-1 Intersections – East/West Corridor

Number	Intersection	Number	Intersection
1	Commerce St at General McMullen Dr	30	Commerce St at Military Plaza/Flores St
2	Commerce St at 29th St	31	Dolorosa St at Military Plaza/Flores St
3	Commerce St at Matyear St	32	Commerce St at Main Ave
4	Commerce St at 24th St	33	Commerce St at Soledad St
5	Commerce St at 19th St	34	Dolorosa St/Market St at Main Plaza
6	Buena Vista St at 19th St	35	Commerce St at St Mary's St
7	Commerce St at Hamilton Ave	36	Market St at St Mary's St
8	Buena Vista St at Hamilton Ave	37	Commerce St at Navarro St
9	Commerce St at Zarzamora St	38	Market St at Navarro St
10	Buena Vista St at Zarzamora St	39	Commerce St at Presa St
11	Commerce St at Rosillo St *	40	Market St at Presa St
12	Buena Vista St at Rosillo St *	41	Commerce St at Losoya St
13	Commerce St at Calaveras	42	Commerce St at Alamo St
14	Buena Vista St at Navidad St	43	Market St at Alamo St
15	Commerce St at Trinity St	44	Commerce St at Bowie St
16	Buena Vista St at Trinity St	45	Market St at Bowie St
17	Commerce St at Las Moras St	46	Commerce St at IH-37 Southbound Frontage Rd
18	Commerce St at Colorado St	47	Commerce St at IH-37 Northbound Frontage Rd
19	Buena Vista St at Colorado St	48	Market St at Tower of the Americas Way
20	Commerce St at Frio St	49	Commerce St at Hoefgen Ave
21	Buena Vista St at Frio St	50	Commerce St at Cherry St
22	Commerce St at Leona St	51	Houston St at Cherry St
23	Commerce St at Pecos St	52	Houston St at Hackberry St
24	Buena Vista St/Dolorosa St at Pecos St	53	Houston St at Pine St
25	Commerce St at San Saba St	54	Houston St at New Braunfels Ave
26	Dolorosa St at San Saba St	55	Houston St at Gevers St
27	Commerce St at Santa Rosa St	56	Houston St at Walters St
28	Dolorosa St at Santa Rosa St	57	Houston St at Mel Waiters Way
29	Commerce St at Laredo St	58	Houston St at Coca Cola Pl

* Signalized Intersections only in the Build 2029 Models

2. EXISTING TRAFFIC DATA

2.1 Roadway Geometry

The geometric data of the study area (e.g. number of lanes, lane configurations) was collected from Open Street Map GIS database, Google Earth 3D environment, Google Street View, field visits, and project design files. The geometry was coded in Synchro and VISSIM to develop operational analysis models.

2.2 Signal Timing

The City of San Antonio provided revised signal timing sheets for signalized intersections along the proposed ART E/W Corridor. For intersections without signal timing sheets, signal timing was determined based on the visual inspection of signal heads at each approach. For signalized intersections, after determining the phasing, the splits and other parameters of timing were coded into the Synchro model.

2.3 Traffic Counts

The City of San Antonio provided traffic volume counts of turning movements at the intersections, referred to as turning movement counts, for the intersections along the ART E/W Corridor. Volumes were adjusted, if necessary, to account for driveways or on-going construction. Individual intersection turning movement counts can be found in **Appendix A.**

3. FUTURE TRAFFIC DATA

3.1 Demand Projection for Future Conditions

To predict future demand along the ART E/W Corridor, traffic volumes for facilities within the study area during 2017, 2025, 2035, and 2045 were studied using data obtained from the Alamo Area Metropolitan Planning Organization (AAMPO) model. The predicted traffic volumes were compared, and their annual growth rates were calculated to 2029 (the original opening year of the ART E/W Corridor Project). To refine the growth rate further, the study area was divided into eight segments based on land use, and the growth rates were calculated and applied separately for each segment. ***Table 3-1*** illustrates the growth rate calculated for each segment. These growth rates were applied to the collected turning movements to obtain projected traffic volumes for the AM and PM peak hours of the scheduled opening year of the ART E/W Corridor Project. Future intersection turning movement counts can be found in **Appendix A.**

Table 3-1 Growth Rate Summary – East/West Corridor

Segment	Corridor	From	To	Growth Rate		
				2017-2025	2025-2035	2035-2045
Segment 1	Commerce St	General McMullen Dr	Medina St	1.00%	1.02%	1.23%
Segment 2	Commerce St	Medina St	I-37	1.00%	1.19%	1.45%
Segment 3	Commerce St	IH-37	Cherry St	1.89%	1.08%	1.56%
Segment 4	Cherry St	Commerce St	Houston St	4.75%	4.61%	2.19%
Segment 5	Houston St	Cherry St	Coca Cola Pl	2.69%	1.18%	1.78%
Segment 6	Buena Vista/Market	24th St	Frio St	1.43%	1.09%	1.26%
Segment 7	Buena Vista/Market	Frio St	Main St	2.04%	1.47%	1.70%
Segment 8	Buena Vista/Market	Main St	IH-37	1.74%	1.48%	1.55%
Overall Corridor				1.46%	1.28%	1.48%

4. TRAFFIC ANALYSIS

To evaluate the traffic operations of the proposed design during the AM and PM weekday peaks, an operational analysis was done using Synchro software Version 11. Synchro evaluates the performance of the intersection and provides results that closely follows the Highway Capacity Manual (HCM) methodology.

The primary purpose of the traffic analysis is to examine the feasibility and impact of ART lanes on the corridor and identify turn lane requirements for general traffic to maintain a satisfactory peak hour flow of vehicular traffic. The following scenarios were considered to perform traffic analysis for the signalized intersections during the AM and PM peak hours within the study area.

4.1 Existing Scenario

Existing condition Synchro models were developed for the ART E/W Corridor using geometric data, traffic count data, and signal timing data. The Existing Scenario reflects the 2019-2020 roadway geometry prior to the most recent on-going construction. It utilizes signal timing plans that were previously in effect. These timings are different from the current 2025 signal timing plans.

4.2 2029 No Build Scenario

The Opening Year No Build scenario reflects the performance of existing geometry under future traffic demand. The scenario will integrate the following changes to geometry, owing to the ongoing construction in the downtown area of the corridor.

1. Alamo St closure to vehicular traffic

NB Alamo St is closed to vehicular traffic and vehicles are rerouted through Losoya St.

2. Market St Cycle Track bicycle facilities

Along Market St between Flores St and Alamo St reduces one travel lane for vehicular traffic.

3. Lane reconfiguration at IH-37 Frontage Rd and Commerce St

NB approach at IH-37 NB Frontage Rd and Commerce St has four lanes with an exclusive right turn lane.

The existing conditions for the ART E/W Corridor roadways were input into the Synchro models created for the base year and used as the basis to develop the No Build Synchro model. Because the ART E/W Corridor Project was originally expected to open in 2029, this year was used for the No Build Synchro analysis. The No Build models utilize the current (2025) existing and revised signal timing plan.

To project the demand from 2019 to 2029, the growth factors of the traffic demand were calculated and applied as described in Section 3.1 of this memorandum.

4.3 2029 Build Scenario

The Build scenario assumes that improvements proposed as part of the ART E/W Corridor Project will be implemented. The Open Year Build models were created based on the Open Year No Build peak hour models mentioned above and by applying the proposed roadway concepts to the geometry of the intersections included in the study area. Multiple revisions were made to the drawings with respect to the BAT Lane configurations and the models were updated accordingly. The Build models utilize the current (2025) existing and revised signal timing plan. **Appendix B** shows the proposed concept ART E/W Corridor drawings used for this analysis. Also, **Appendix C** outlines the proposed alignment and configuration of Bus Rapid Transit (BRT) lanes across the study corridor. It documents the presence and directional placement of BRT lanes—whether center, left, right, or mixed configurations—at specific intersections along the route.

4.3.1 Operational Adjustments

4.3.1.1 U-Turn Movements

To enhance accessibility to driveways situated between major intersections, U-turn movements will be allowed along Commerce Street at signalized intersections from General McMullen Drive to 24th Street. The anticipated U-turn traffic volumes for both AM and PM peak hours were estimated based on projected trip patterns. These volumes were systematically incorporated and redirected to appropriate sources and sinks along the corridor to ensure smooth traffic flow.

4.3.1.2 New Signalized Intersections (Traffic Signals and Pedestrian Hybrid Beacons)

Two new signalized intersections are incorporated into the Build Scenario of the ART E/W Corridor based on completion of signal warrant analysis (included in **Appendix D**) at the below locations:

- Commerce St at Rosillo St
- Buena Vista St at Rosillo St

Currently, these intersections are regulated by stop signs. The implementation of traffic signals is expected to improve traffic operations and safety for bus patrons at these locations.

In addition to the installation of new traffic signals, pedestrian hybrid beacons (PHBs) are also recommended based on their location to new bus stops. Traffic signals were not warranted at these locations.

- Commerce St at Picoso St
- Buena Vista St at Picoso St

These improvements are expected to improve safety for pedestrians crossing Commerce and Buena Vista Streets. **Appendix D** includes further details about the two locations.

4.3.2 Suggested Improvements for Operational Needs

4.3.2.1 Medians

To support the ART operations for center-running segments, additional medians are recommended to improve safety, encourage compliance of lanes, and provide continuity of the lanes system. Prohibiting vehicle turns across the roadway is the best practice because the ART configuration operations differ from typical roadway cross-sections.

To confirm safety improvements, TxDOT's Crash Record Information System (CRIS) was queried to obtain study area crash data for five years between 2019 and 2023. The goal of this was to identify incidents occurring within the center-running segments currently that may be mitigated due to access management and restricted turns created by the proposed center-running dedicated lanes. The following methodology was used for the safety analysis along the median section of the ART E/W Corridor Project:

- Obtain and analyze historical crash data for the corridor that occurred during 2019 to 2023.
- Use historical crash data to estimate crashes for the E/W corridor with the ART E/W Corridor Project (Build Scenarios).
    - At the signalized intersections, no improvements related to the ART E/W Corridor Project assumed as the median is open, and all movements are allowed.
    - Angle crashes related to left turn movements are removed because these will be improved with center median BRT implementation.
- Prepare crash summary for the Existing and Build scenarios for comparison.

Based on review of the crash data, the proposed center median is expected to reduce the crashes by approximately 15%. **Appendix E** provides a crash memo and exhibit showing the crash analysis with and without the median.

4.3.2.2 Protected Signals

At signalized intersections along ART E/W Corridor Project's center running sections, protected left turns, where applicable, are recommended to improve safety because motorists are less likely to see and anticipate the ART vehicle. This change from permitted left turns to protected left turns will increase some delays at these left turn lanes.

5. TRAFFIC ANALYSIS RESULTS SUMMARY

5.1 Synchro Analysis

Based on the delay experienced by vehicles through the intersection, the Synchro software assigns a LOS to represent either the existing or anticipated quality of service. The HCM defines six levels of service, ranging from A to F. LOS A represents the best operating conditions during analysis periods, and LOS F represents the worst conditions. Vehicles passing through an intersection with LOS F will experience significant delay and will have to wait for more than one cycle to clear the intersection. Per the TxDOT Roadway Design Manual, heavily developed urban areas may necessitate the use of LOS D for roadway design. LOS E represents near capacity and congestion is imminent during busier times of the day/year and is typically accepted for multimodal projects.

Table 5-1 shows the performance measures used for the HCM analysis and the thresholds for assigning the LOS.

Table 5-1 HCM Performance Measures – Signalized intersection

LOS Threshold	Delay (Seconds per Vehicle)	Congestion Condition
LOS A	<=10	Free flow, no delay
LOS B	>10-20	Stable flow, slight delay
LOS C	>20-35	Stable flow, acceptable delay
LOS D	>35-55	Approaching unstable flow
LOS E	>55-80	Unstable flow, significant delays
LOS F	>80	Forced flow, queue fails to clear

Table 5-2 and Figure 5-1 summarize the number of intersections falling under each Level of Service (LOS) category during the AM peak hour. This analysis compares existing conditions with future projections under various 2029 scenarios. Similarly, Table 5-3 and Figure 5-2 present the LOS distribution for the PM peak hour.

Table 5-2 Synchro AM Peak LOS Summary

LOS	Existing Scenario	2029 No Build Scenario	2029 Build Scenario
A	27	26	24
B	19	19	22
C	8	7	8
D	2	4	4
E	0	0	0
F	0	0	0

Note: The numbers represent the total number of intersections falling under each LOS category.

Figure 5-1 Summary Results for the operational performance of Scenarios during AM Peak Hour

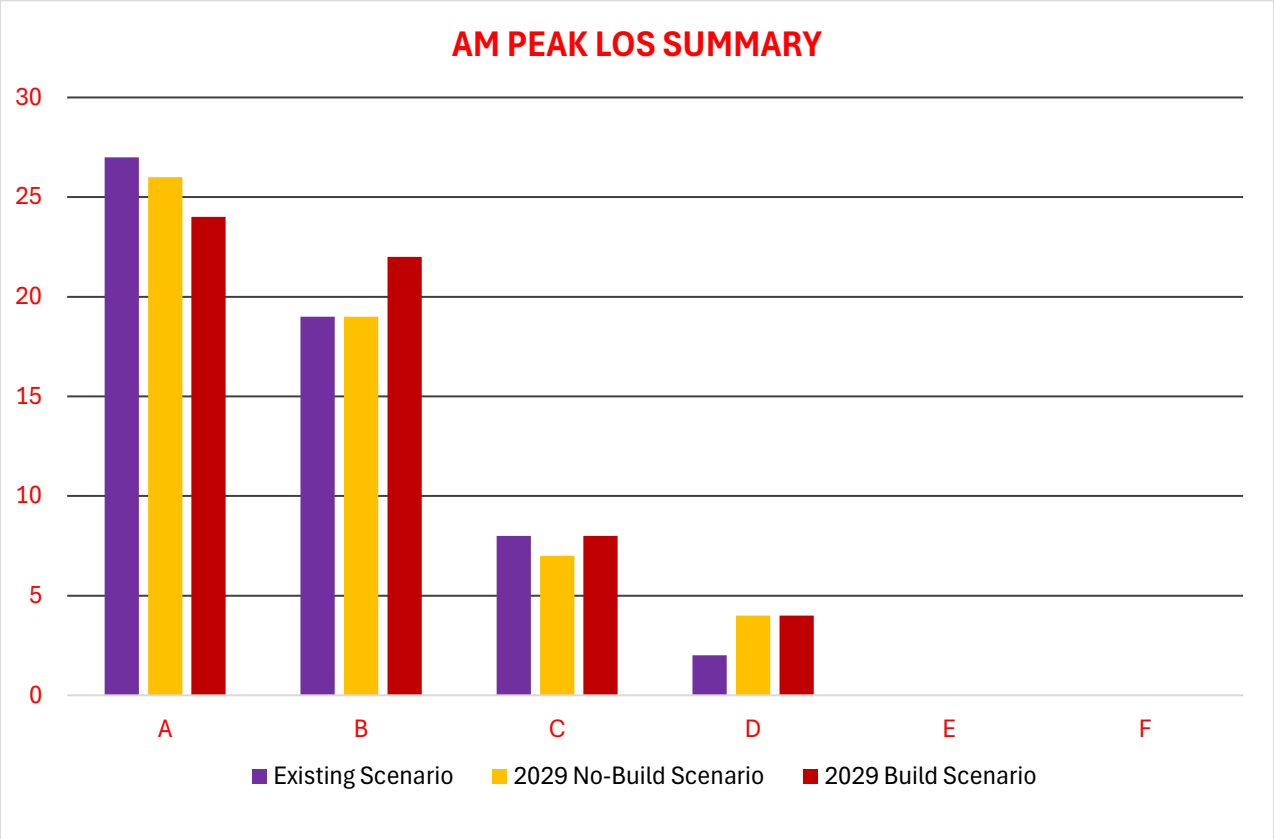
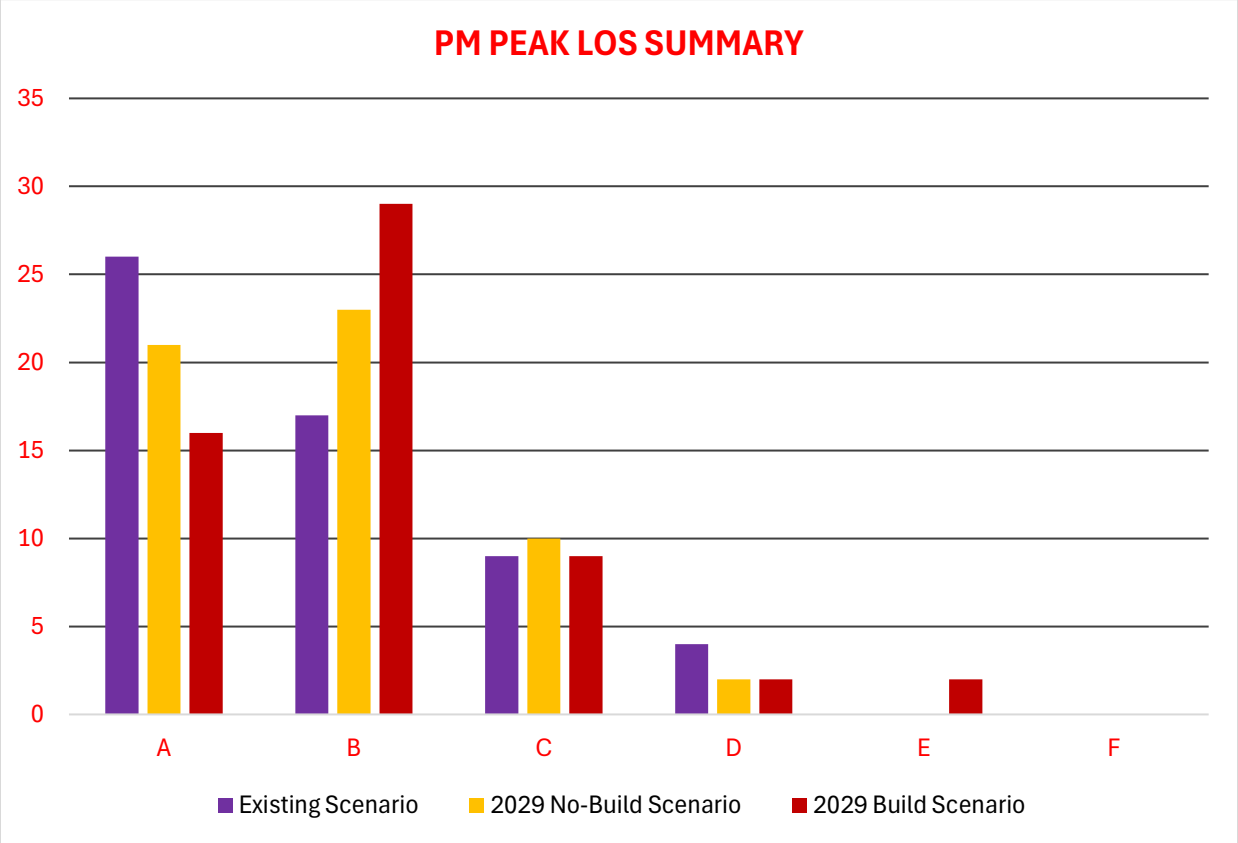


Table 5-3 Synchro PM Peak LOS Summary

LOS	Existing Scenario	2029 No Build Scenario	2029 Build Scenario
A	26	21	16
B	17	23	29
C	9	10	9
D	4	2	2
E	0	0	2
F	0	0	0

Note: The numbers represent the total number of intersections falling under each LOS category.

Figure 5-2 Summary Results for the operational performance of Scenarios during PM Peak Hour



As noted in Table 1-1, the two intersections at Rosillo Street are signalized only in the Build 2029 models. As a result, the total number of signalized intersections analyzed varies by scenario:

- 56 in the Existing condition,
- 56 in the No Build 2029 scenario, and
- 58 in the Build 2029 scenarios.

Key Observations:

In the existing conditions or Base Year (Existing Scenario):

- All intersections operate at LOS D or better during the AM and PM peak.
- No intersections operate at LOS E or LOS F during the AM and PM peak.

For the opening year, without the ART E/W Corridor Project (2029 No Build Scenario):

- All intersections operate at LOS D or better for the AM and PM peak.
- No intersections operate at LOS E or LOS F during the AM and PM peak.

For the opening year, with the ART E/W Corridor Project (2029 Build Scenarios):

- All intersections operate at LOS D or better for the AM peak.
- No intersections operate at LOS E or LOS F during the AM peak.
- All intersections operate at LOS E or better for the PM peak.
- No intersections operate at LOS F during the PM peak.

To better assess the magnitude of the impacts, particularly those attributed to the ART E/W Corridor, ***Table 5-4*** summarizes average delay for the AM and PM peak periods. The average delay tables present the **average control delay** for all intersections within the study area, aggregated for each scenario. These tables provide a comparative overview of how different traffic scenarios impact intersection delays, allowing for a direct comparison between existing conditions and future projections.

Table 5-4 Average Control Delay for Each Scenario

LOS	Existing Scenario	2029 No Build Scenario	2029 Build Scenario
AM Avg. Control Delay (s/veh)	12.7	13.1	14.2
AM Delay Increase (%) vs. Existing	N/A	3.1%	11.8%
PM Avg. Control Delay (s/veh)	13.9	14.7	16.7
PM Delay Increase (%) vs. Existing	N/A	5.9%	20.2%

The table indicates an increase in average control delay of 3.1% and 5.9% for the 2029 No Build Scenario's AM and PM peak periods, respectively. This suggests that traffic growth alone (from 2019 to 2029) accounts for only 0.4 second and 0.8 second increases in delay during AM and PM peak hours, respectively.

The table also indicates an increase in average control delay of 11.8% and 20.2% for the 2029 Build Scenario's AM and PM peak periods, respectively. This equates to an increase of approximately 1.5 seconds and 2.8 seconds for the AM and PM peak hours, respectively.

Considering that 3.1% and 5.9% of the delay increase can be attributed to background traffic growth (from the 2029 No Build Scenario results), it can be inferred that the ART E/W Corridor Project contributes to an additional 8.7% and 14.2% increase in delay, translating to less than 1.1 seconds and 2.0 seconds on average.

Overall, the impact of the ART E/W Corridor Project on expected delays in the Open Year (2029) is expected to be minimal and would not result in a severe degradation of the average LOS along the study area.

Table 5-5 and 5-6 summarize the peak hour intersection-wide LOS and delay for all intersections in the study area. **Appendix F** contains a detailed summary table for each scenario's Synchro results.

Table 5-5 Synchro Intersection Analysis Summary (AM)

Intersection	Existing			2029 No-Build		2029 Build	
	AM Peak						
	Cycle Length	LOS	Delay	LOS	Delay	LOS	Delay
Commerce St at Gen McMullen St	140	C	32.1	D	44.8	D	50.5
Commerce St at 29th St	140	A	5.8	A	2.7	B	10.9
Commerce St at Matyear St	140	A	6.6	A	7.7	B	19.9
Commerce St at 24th St	140	C	22.7	D	35.4	D	51.2
Commerce Street at 19th St	65	A	8.7	A	7.6	A	7.6
Buena Vista St at 19th St	80	B	11.6	A	9.8	A	9.8
Commerce Street at Hamilton Ave	80	B	12.2	B	12.1	B	15.7
Buena Vista St at Hamilton Ave	65	B	10.6	A	4.8	A	7.0
Commerce St at Zarzamora St	80	B	12.7	B	11.6	B	10.2
Buena Vista St at Zarzamora St	80	B	15.7	B	18.1	C	20.5
Commerce St at Rosillo St	-	-	-	-	-	A	6.4
Buena Vista St at Rosillo St	-	-	-	-	-	A	6.7
Commerce St at Calaveras	80	A	7.2	A	6.0	A	5.2
Buena Vista St at Navidad St	80	A	5.6	A	2.7	B	12.9
Commerce St at Trinity St	80	A	8.4	B	11.0	B	11.2
Buena Vista St at Trinity St	80	A	4.9	A	5.8	A	7.3
Commerce St at Las Moras St	80	A	4.4	A	9.1	A	9.1
Commerce St at Colorado St	65	B	12.2	B	12.4	B	12.1
Buena Vista St at Colorado St	65	A	6.3	B	10.2	B	13.8
Commerce St at Frio St	100	C	25.4	B	17.6	B	16.6
Buena Vista St at Frio St	100	C	20.9	C	21.9	C	23.0
Commerce St at Leona St	50	A	3.9	A	3.1	A	3.1
Commerce St at Pecos St	50	-	-	A	1.0	A	1.4
Buena Vista St at Pecos St	50	B	11.2	B	11.5	B	11.5
Commerce St at San Saba St	50	B	10	B	14.1	B	14.0
Dolorosa St at San Saba St	60	A	9.6	B	13.7	B	13.7
Commerce St at Santa Rosa St	100	A	0.8	A	1.4	A	1.4
Dolorosa St at Santa Rosa St	100	C	26.9	C	30.9	C	30.1
Commerce St at Laredo St	100	C	24.9	C	26.9	C	26.6

Commerce St at Military Plaza/Flores St	100	A	6.1	A	2.9	A	8.7
Dolorosa St at Military Plaza/Flores St	100	B	17	B	16.5	B	16.5
Commerce St at Main Ave	100	B	11.3	C	20.6	C	20.7
Commerce St at Soledad St	100	A	1.9	A	0.7	A	0.5
Dolorosa St at Main Plaza	100	A	8.1	A	0.2	A	0.5
Commerce Street at St Mary's St	100	A	3.1	A	2.2	A	2.2
Market St at St. Mary's St	100	B	12.4	A	9.6	A	9.3
Commerce St at Navarro St	100	B	11.3	B	11.1	B	11.2
Market St at Navarro St	100	A	8.9	A	8.2	A	8.3
Commerce St at Presa St	100	B	10	B	10.6	B	10.6
Market St at Presa St	100	A	3.4	A	2.2	A	4.5
Commerce St at Losoya St	100	A	3.5	A	4.0	A	3.5
Commerce St at Alamo St	100	A	4.8	A	8.2	B	11.1
Market St at Alamo St	100	A	4.7	B	11.2	B	13.0
Commerce St at Bowie St	100	C	25.6	C	23.3	C	24.6
Market St at Bowie St	100	B	19.9	C	23.8	C	23.8
SB IH-37 Frontage Road and Commerce Street	100	D	48.2	C	32.7	C	32.7
NB IH-37 Frontage Road and Commerce Street	Free	C	34.3	D	40.6	D	40.6
Market St at Tower of Americas Way	Free	D	50.1	D	43.5	D	43.5
Commerce St at Hoefgen St	Free	A	8.6	A	8.9	A	8.9
Commerce St at Cherry St	100	A	4.5	A	4.6	A	4.6
Houston St at Cherry St	60	B	12.9	B	13.6	B	13.2
Houston St at Hackberry St	60	B	12.3	B	10.2	A	9.9
Houston St at Pine St	60	B	14.6	B	15.0	B	18.1
Houston St at New Braunfels Ave	60	A	9.2	A	9.6	B	10.1
Houston St at Gevers St	90	B	17.4	B	18.7	B	18.7
Houston St at Walters St	45	A	5.8	A	6.0	A	5.7
Houston St at Mel Waiters Way	45	B	12.2	B	13.0	B	12.5
Houston St at Coca cola Place	45	A	6	A	6.7	A	5.8

Table 5-6 Synchro Intersection Analysis Summary (PM)

Intersection	Existing			2029 No-Build		2029 Build	
	PM Peak						
	Cycle Length	LOS	Delay	LOS	Delay	LOS	Delay
Commerce St at Gen McMullen St	140	D	46.1	D	51.3	E	70.7
Commerce St at 29th St	140	A	2.7	A	4.6	B	19.3
Commerce St at Matyear St	140	A	4	A	9.5	B	15
Commerce St at 24th St	140	C	24.4	C	34.7	E	71.8
Commerce Street at 19th St	75	A	8.5	A	9.9	A	10
Buena Vista St at 19th St	80	B	12.6	B	13.3	B	17.7
Commerce Street at Hamilton Ave	80	A	6.3	A	6.9	B	10.5
Buena Vista St at Hamilton Ave	75	B	14	A	9.1	B	10.3
Commerce St at Zarzamora St	80	C	23.1	C	33.6	D	42.9
Buena Vista St at Zarzamora St	80	B	12.9	B	14.3	B	17.7
Commerce St at Rosillo St	-	-	-	-	-	B	16.9
Buena Vista St at Rosillo St	-	-	-	-	-	C	22.2
Commerce St at Calaveras	80	A	8.9	A	6.3	A	6.1
Buena Vista St at Navidad St	80	B	12.7	B	15.2	B	11.6
Commerce St at Trinity St	80	A	6.9	B	11.8	B	11.7
Buena Vista St at Trinity St	80	B	11	B	11.3	B	12.6
Commerce St at Las Moras St	80	A	4.7	B	13	B	13
Commerce St at Colorado St	75	B	14.3	B	15.5	B	15.5
Buena Vista St at Colorado St	75	B	12.3	B	10.8	B	12.9
Commerce St at Frio St	100	C	28.4	C	29.5	C	29.1
Buena Vista St at Frio St	100	C	24.2	C	20.1	C	24.9
Commerce St at Leona St	50	A	3.4	A	2.6	A	2.6
Commerce St at Pecos St	50	-	-	A	1.7	A	1.7
Buena Vista St at Pecos St	50	B	11.5	B	12.2	B	12.2
Commerce St at San Saba St	60	A	8.8	B	15.7	B	15.6
Dolorosa St at San Saba St	100	A	9.9	A	7.7	A	8.1
Commerce St at Santa Rosa St	100	A	1	A	1	A	0.9
Dolorosa St at Santa Rosa St	100	C	24.4	C	29.5	C	29.8
Commerce St at Laredo St	100	B	19.1	B	18.8	B	18.1

Commerce St at Military Plaza/Flores St	100	A	6.1	A	7	A	9.4
Dolorosa St at Military Plaza/Flores St	100	B	19.5	C	22.9	C	23.4
Commerce St at Main Ave	100	B	11.2	B	13.4	B	14
Commerce St at Soledad St	100	A	3.8	A	8	A	6
Dolorosa St at Main Plaza	100	A	7.4	A	0.2	A	0.2
Commerce Street at St Mary's St	90	A	4.3	A	4.8	A	5
Market St at St. Mary's St	100	B	15.9	B	17	B	16.4
Commerce St at Navarro St	100	D	35.4	B	16.9	B	17.1
Market St at Navarro St	100	A	9.8	A	8.6	A	8.6
Commerce St at Presa St	100	B	11.8	B	14.7	B	14.7
Market St at Presa St	100	A	7.4	A	6.5	A	6.8
Commerce St at Losoya St	100	A	4.7	A	8.1	A	7.7
Commerce St at Alamo St	100	A	9.6	A	9.3	B	11
Market St at Alamo St	100	A	6.4	B	16.1	B	17.3
Commerce St at Bowie St	100	C	25	C	22.5	C	22.1
Market St at Bowie St	100	C	21	C	22.1	C	20.6
SB IH-37 Frontage Road and Commerce Street	Free	C	24.7	C	28.9	C	29.5
NB IH-37 Frontage Road and Commerce Street	Free	D	49.9	B	19.4	B	19.4
Market St at Tower of Americas Way	Free	D	36	D	39.5	D	39.5
Commerce St at Hoefgen St	100	A	9.2	B	13.4	B	13.6
Commerce St at Cherry St	60	A	5.9	A	6.1	A	6.1
Houston St at Cherry St	60	A	8.9	B	13.8	B	12
Houston St at Hackberry St	60	B	12.3	B	15.3	B	15.1
Houston St at Pine St	60	B	13.7	B	14.2	B	14.2
Houston St at New Braunfels Ave	90	B	10.5	B	10.7	B	10.8
Houston St at Gevers St	45	C	27	C	30	C	31
Houston St at Walters St	45	A	4.8	A	5.3	A	4.3
Houston St at Mel Waiters Way	45	B	11.4	B	12.5	B	14.3
Houston St at Coca cola Place	80	A	5.1	A	5.4	A	4.9

5.2 Vissim Analysis

In addition to Synchro models, Vissim models were also developed for the existing year (2019) as well as original opening year (2029) No Build and original opening year (2029) Build conditions. Existing year Vissim models were developed for the AM and PM peak, and calibrated to the travel time and traffic count data. An extensive calibration process was followed throughout the development of Vissim models, and the results of the calibration process were within Federal Highway Administration (FHWA) guidelines. These calibrated Vissim models were modified to create No Build and Build models for the original opening year.

The Vissim models acted as a tool to identify and resolve issues at a microscopic level, helping to:

- Identify turn bay lengths to prevent queue spillback and blocking through traffic
- Identify short weave segments that caused congestion
- Code transit priority and non-standard signal phasing
- Identify excessive queuing along side streets at key signalized intersections and develop geometric modifications, if needed.

6. CONCLUSION

This analysis solely focuses on vehicle operations to determine geometric requirements and phasing schemes to provide satisfactory vehicular traffic flow. The existing roadway geometry without the ART E/W Corridor Project is referred to as No Build, and the roadway geometry proposed for the ART E/W Corridor Project is referred to as Build in this memorandum. A summary of the results is as follows:

2029 AM Peak (Opening Year)

- Without the ART E/W Corridor Project (No Build):
  - all signalized intersections are expected to operate at LOS D or better, and
  - no signalized intersections are expected to operate at LOS E or F.
- With the ART E/W Corridor Project (Build):
  - all signalized intersections are expected to operate at LOS D or better, and
  - no signalized intersections are expected to operate at LOS E or F.
- This analysis suggests that during the AM Peak, the ART E/W Corridor Project has no significant impact on traffic operations when compared with No Build.

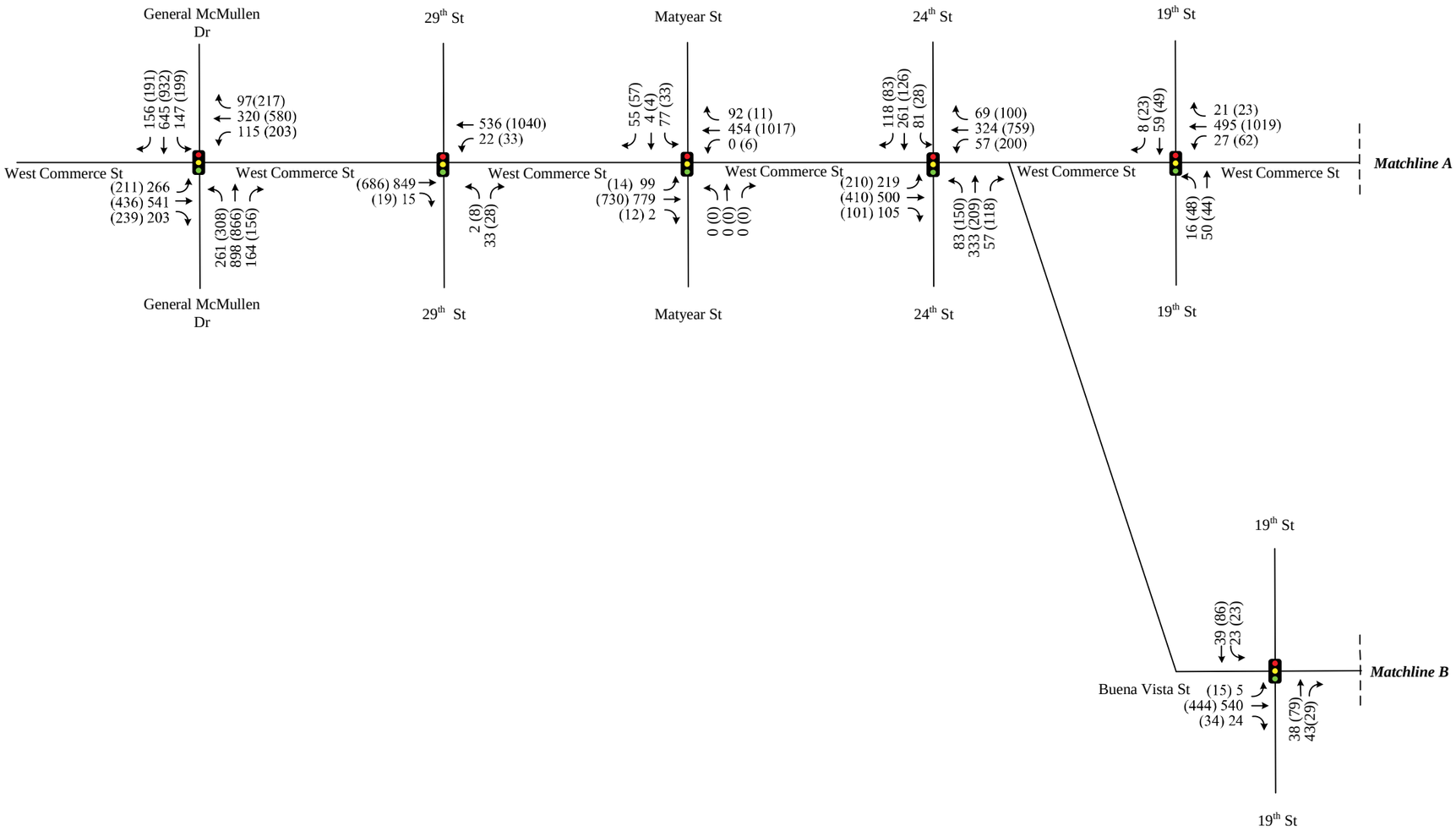
2029 PM Peak (Opening Year)

- Without the ART E/W Corridor Project (No Build):
  - all signalized intersections are expected to operate at LOS D or better, and
  - no signalized intersections are expected to operate at LOS E or F.
- With the ART E/W Corridor Project (Build):
  - 56 signalized intersections are expected to operate at LOS D or better,
  - 2 signalized intersections are expected to operate at LOS E, and
  - no signalized intersections are expected to operate at LOS F.
- This analysis suggests that during the PM Peak, the ART E/W Corridor Project has no significant impact on traffic operations when compared with No Build.

The results of the traffic analysis suggest that the ART E/W Corridor Project contributes to an additional 8.7% and 14.2% increase in delay, translating to less than 1.1 seconds and 2.0 seconds on average per vehicle during AM and PM peak periods, respectively. Overall, the impact of the

ART E/W Corridor Project on expected delays in the Open Year (2029) is expected to be minimal and would not result in a severe degradation of the average LOS along the study area.

A. TRAFFIC VOLUMES



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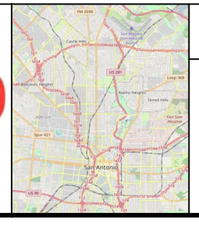


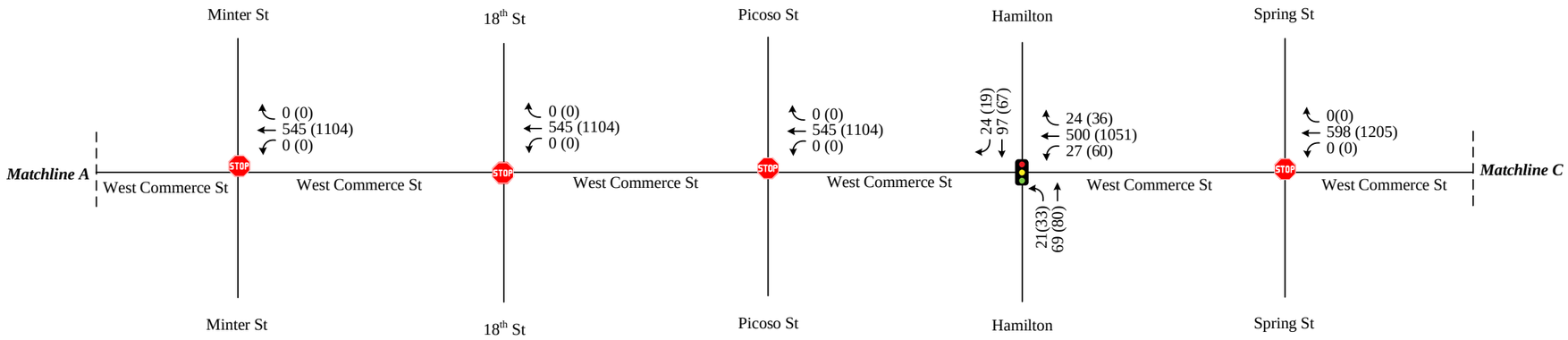
L E G E N D

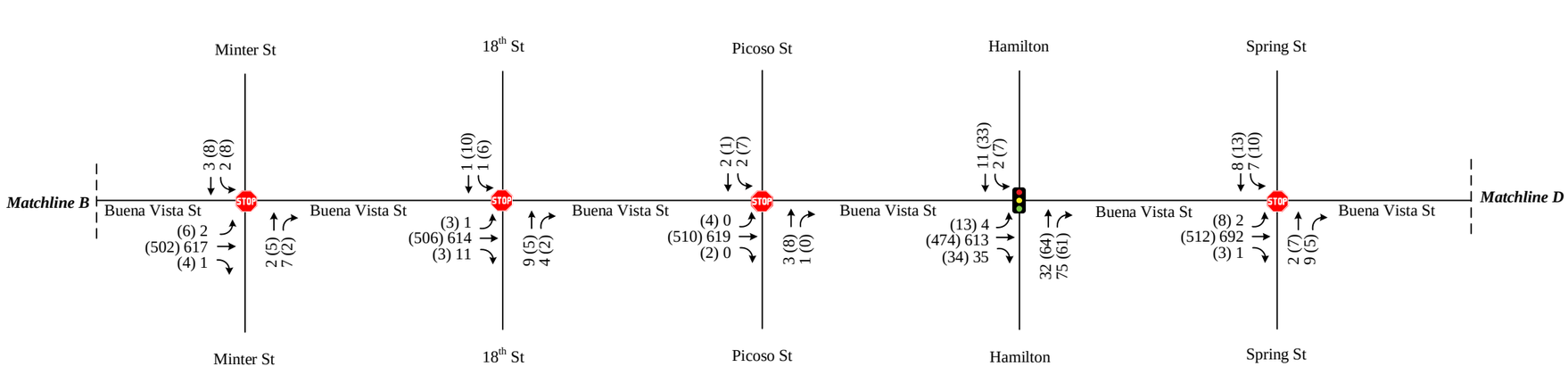
——	Existing Roadway
→	Turning Movement
XX (XX)	AM (PM) Peak Volumes

VIA East-West ART Corridor
San Antonio, Texas

2019 Base Year Peak Hour Traffic Volumes

October 2024





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L E G E N D

Existing Roadway

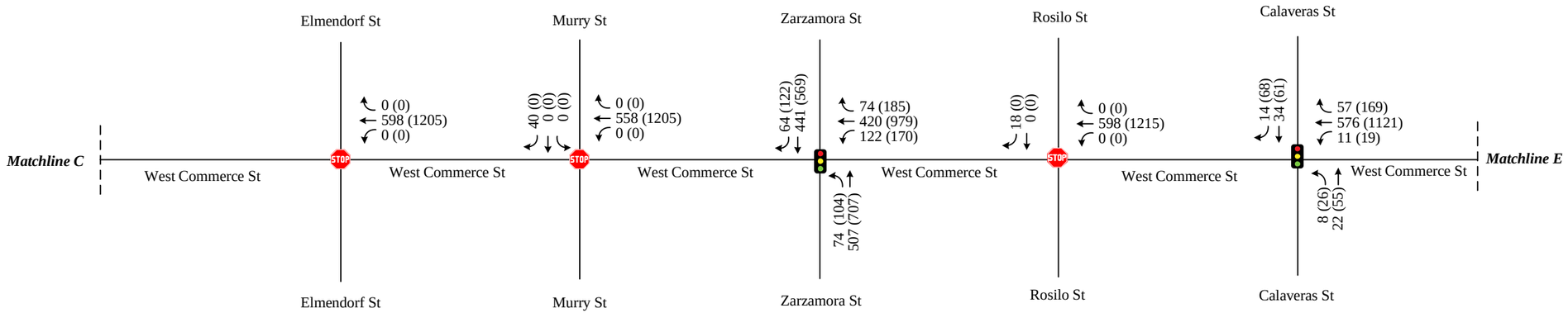
Turning Movement

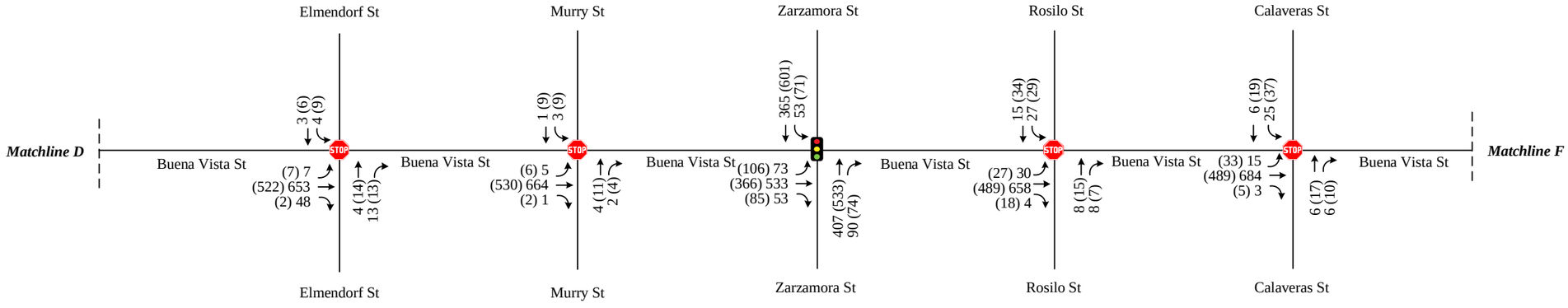
XX (XX) AM (PM) Peak Volumes

VIA East-West ART Corridor
San Antonio, Texas

2019 Base Year Peak Hour Traffic Volumes

October 2024





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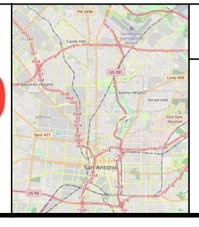


L E G E N D

Existing Roadway

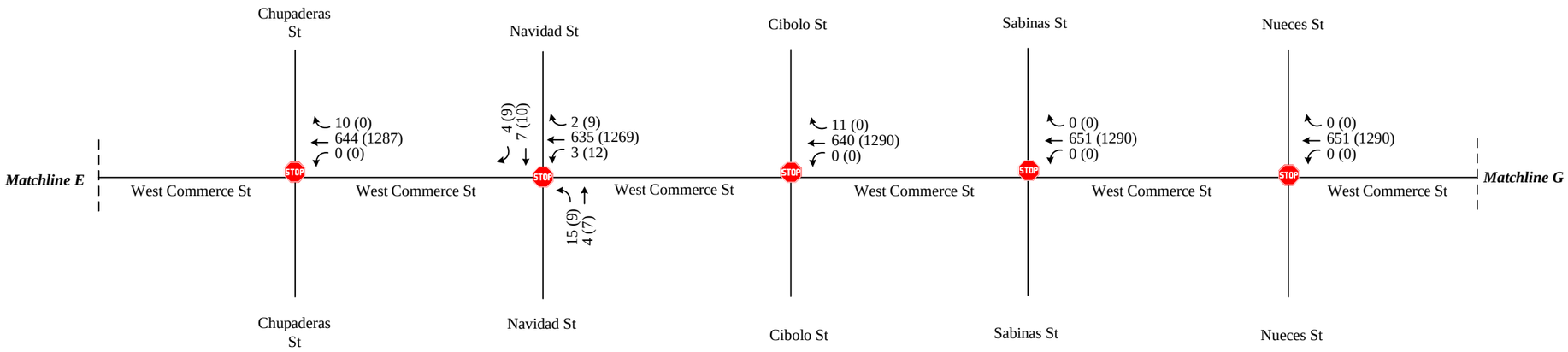
Turning Movement

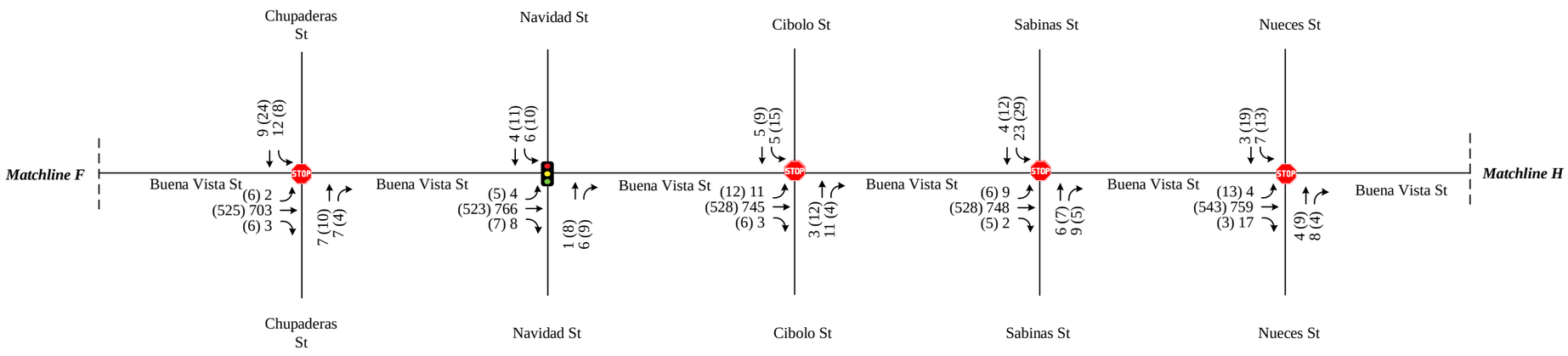
XX (XX) AM (PM) Peak Volumes

VIA East-West ART Corridor
San Antonio, Texas

2019 Base Year Peak Hour Traffic Volumes

October 2024





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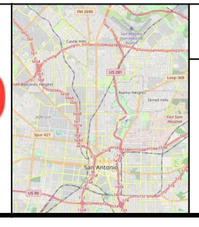


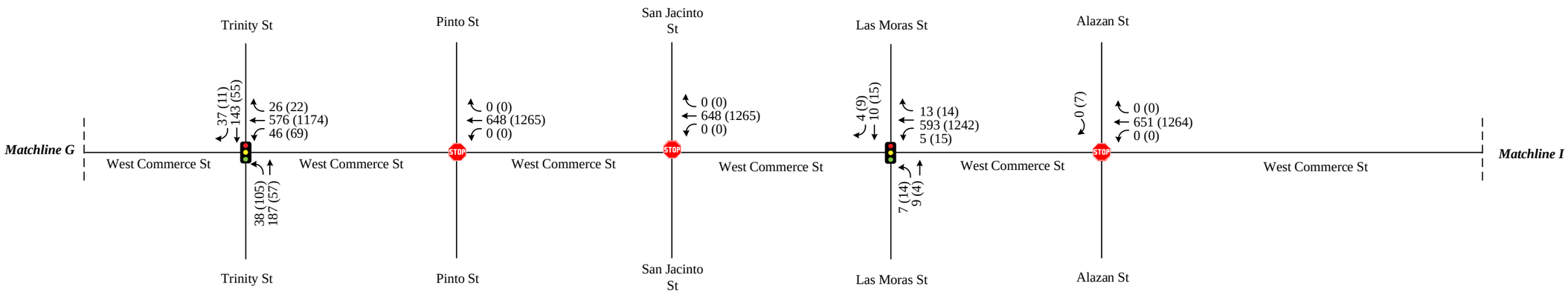
L E G E N D

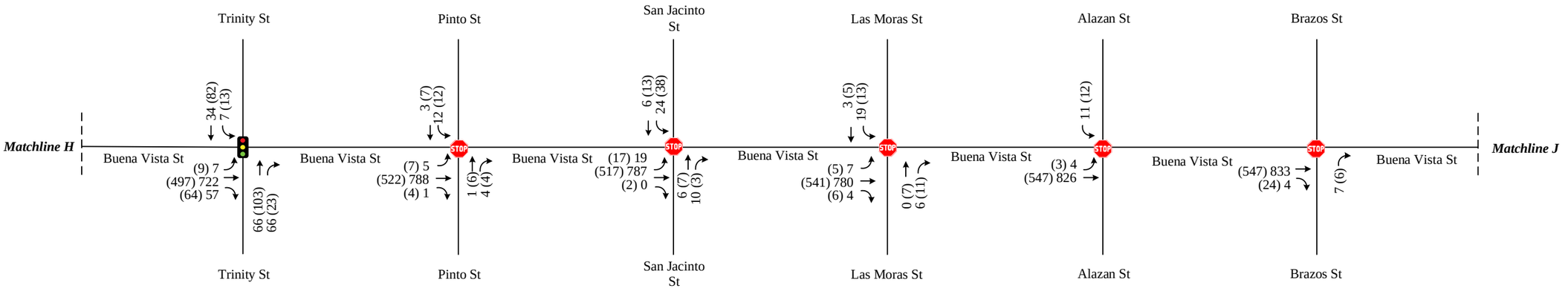
——	Existing Roadway
⟶	Turning Movement
XX (XX)	AM (PM) Peak Volumes

VIA East-West ART Corridor
San Antonio, Texas

2019 Base Year Peak Hour Traffic Volumes

October 2024





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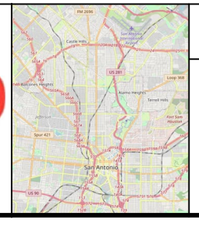


L E G E N D

Existing Roadway

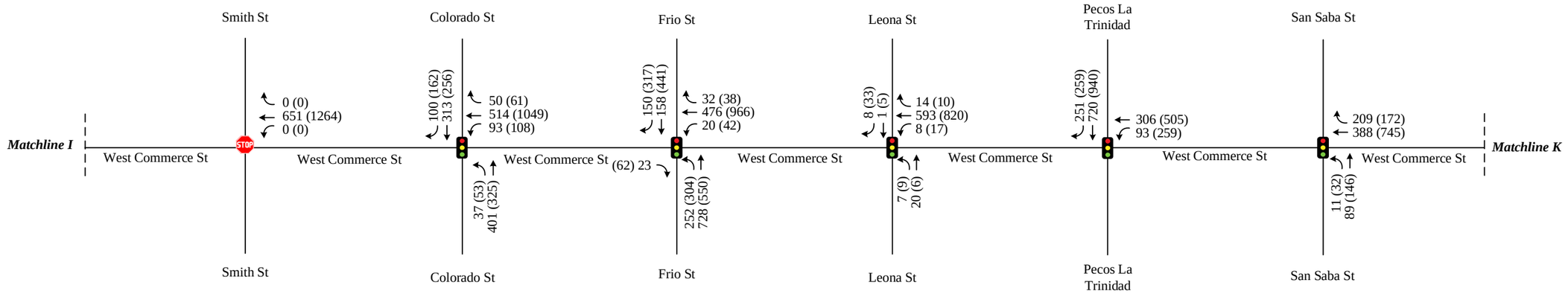
Turning Movement

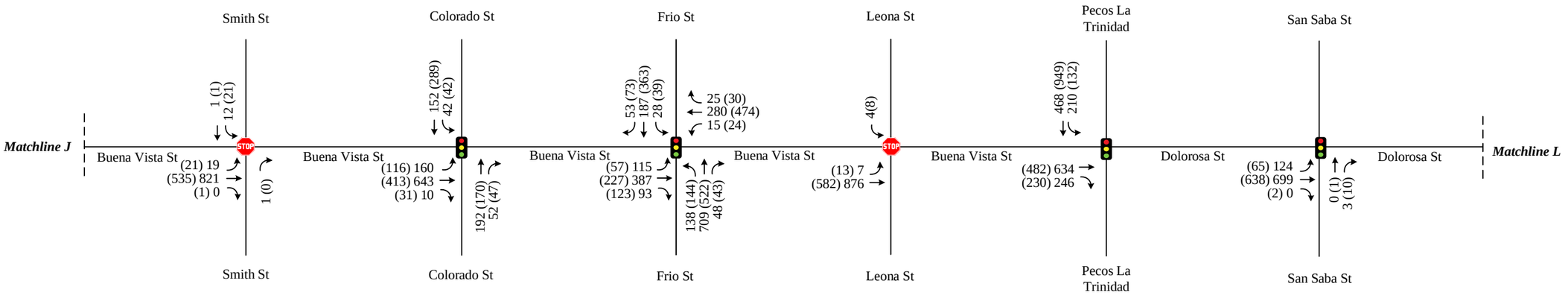
XX (XX) AM (PM) Peak Volumes

VIA East-West ART Corridor
San Antonio, Texas

2019 Base Year Peak Hour Traffic Volumes

October 2024





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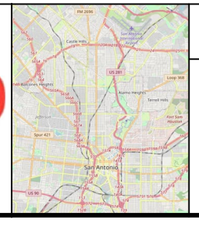


L E G E N D

Existing Roadway

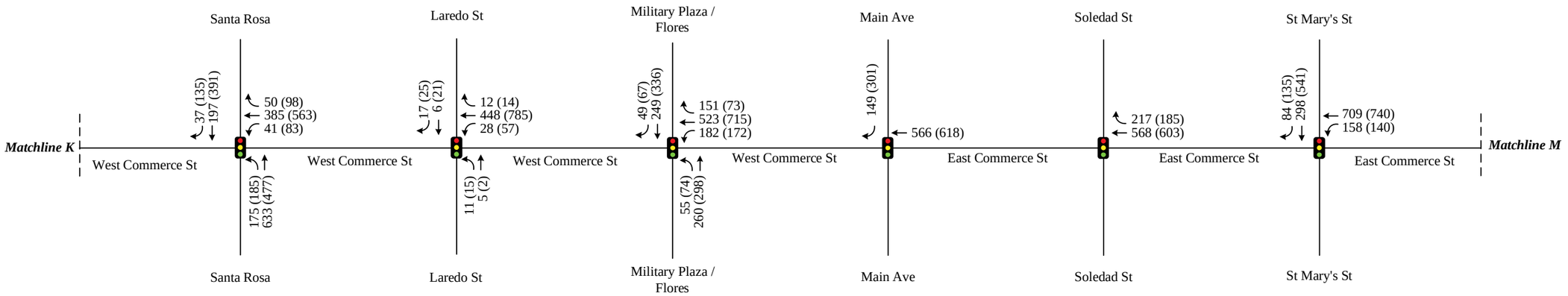
Turning Movement

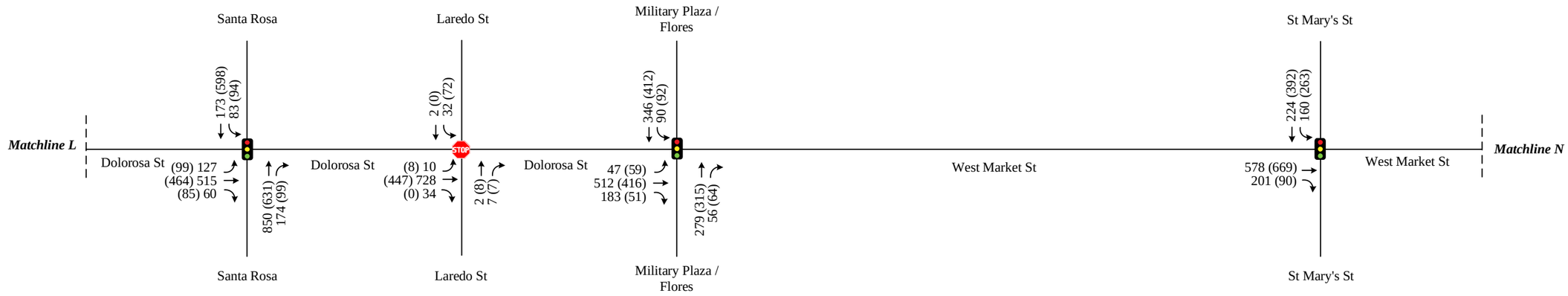
XX (XX) AM (PM) Peak Volumes

VIA East-West ART Corridor
San Antonio, Texas

2019 Base Year Peak Hour Traffic Volumes

October 2024





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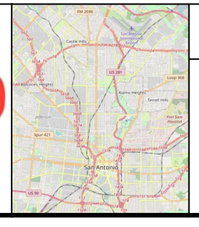


L E G E N D

Existing Roadway

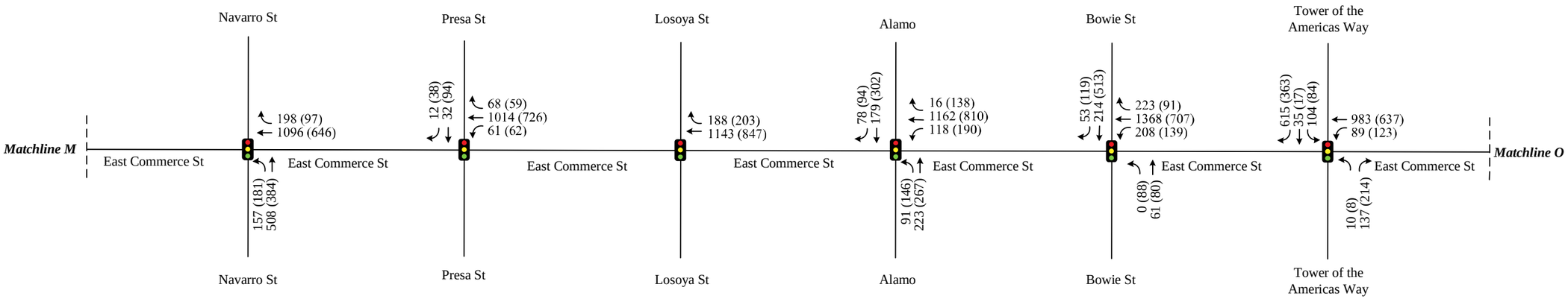
Turning Movement

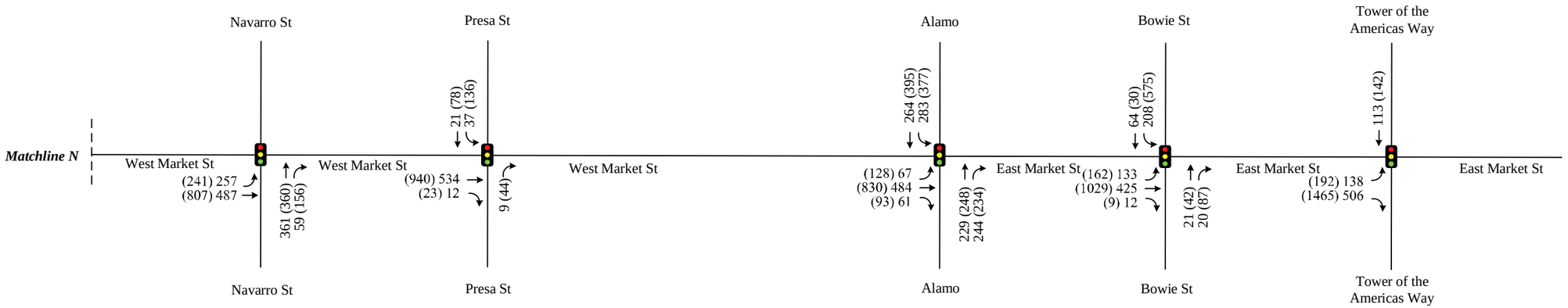
XX (XX) AM (PM) Peak Volumes

VIA East-West ART Corridor
San Antonio, Texas

2019 Base Year Peak Hour Traffic Volumes

October 2024





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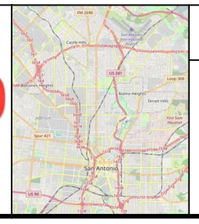


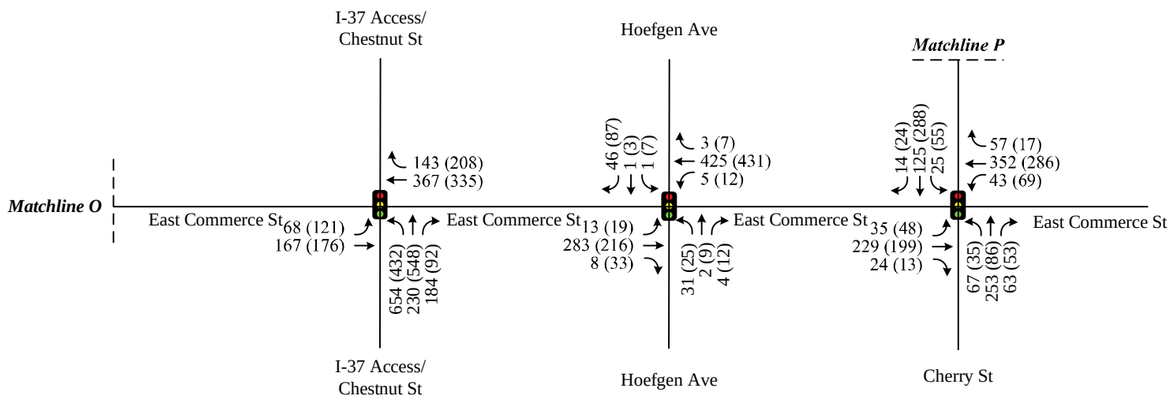
L E G E N D

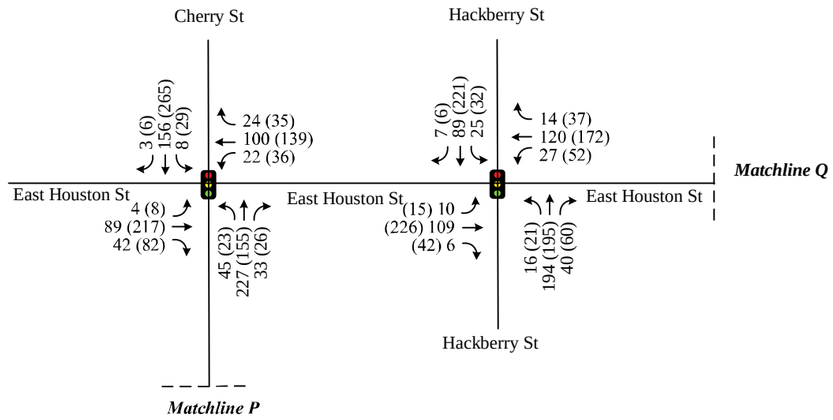
——	Existing Roadway
→	Turning Movement
XX (XX)	AM (PM) Peak Volumes

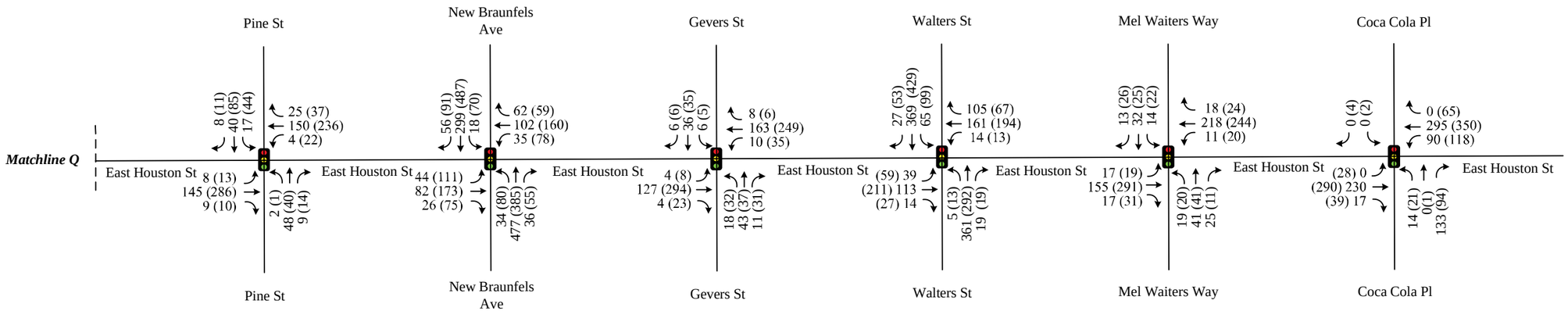
VIA East-West ART Corridor
San Antonio, Texas

2019 Base Year Peak Hour Traffic Volumes

October 2024







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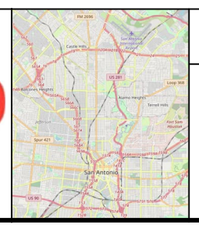


L E G E N D

Existing Roadway

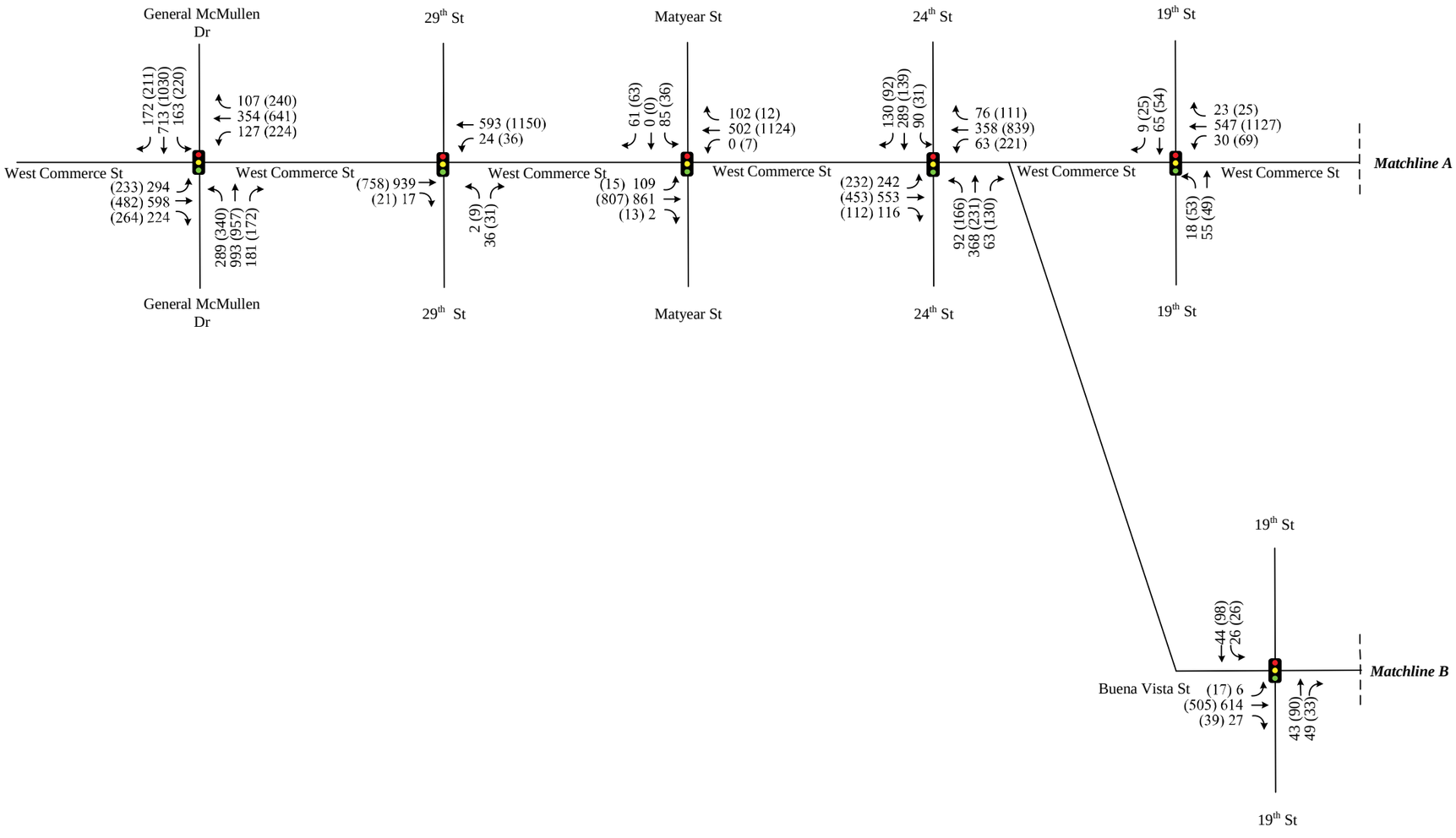
Turning Movement

XX (XX) AM (PM) Peak Volumes

VIA East-West ART Corridor
San Antonio, Texas

2019 Base Year Peak Hour Traffic Volumes

October 2024



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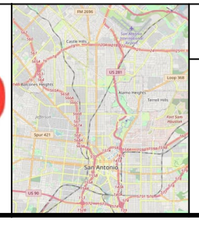


L E G E N D

Existing Roadway

Turning Movement

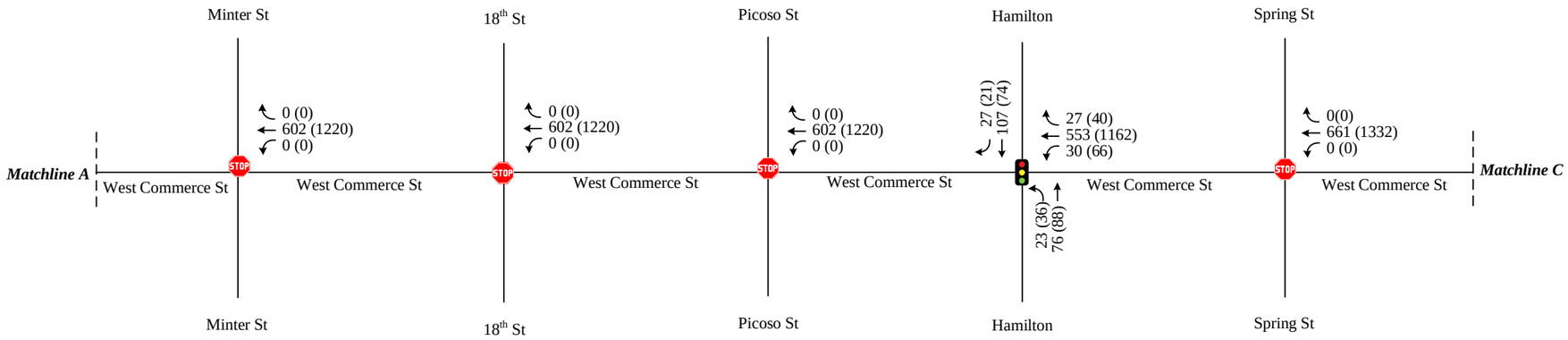
XX (XX) AM (PM) Peak Volumes

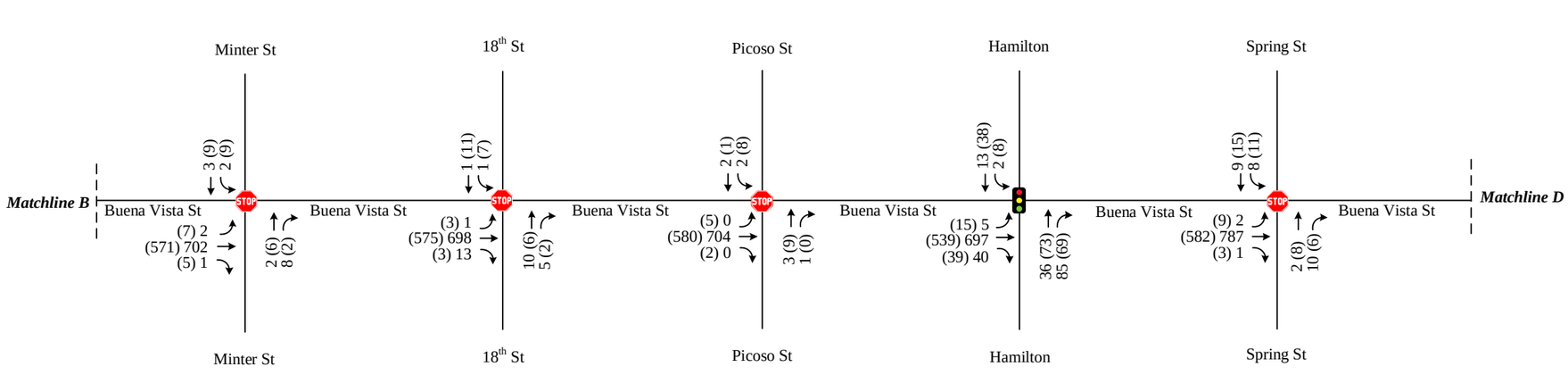
VIA East-West ART Corridor
San Antonio, Texas

2029 No Build Peak Hour Traffic Volumes

October 2024

Page 1





Not to scale

L E G E N D

Existing Roadway

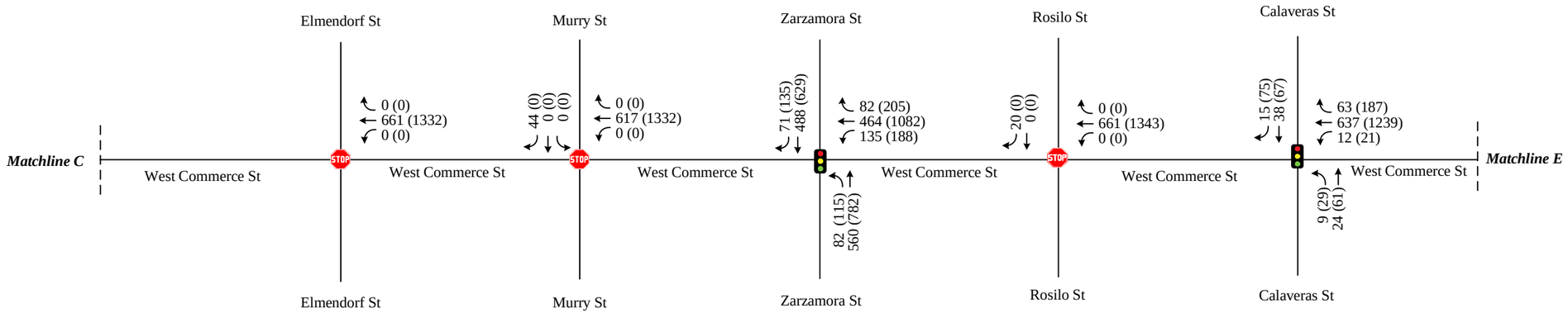
Turning Movement

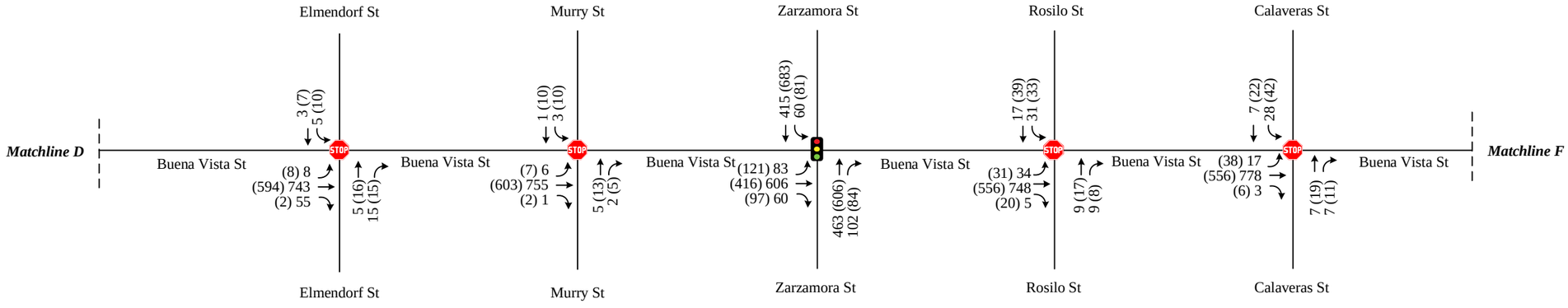
XX (XX) AM (PM) Peak Volumes

VIA East-West ART Corridor
San Antonio, Texas

2029 No Build Peak Hour Traffic Volumes

October 2024





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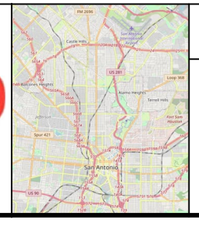

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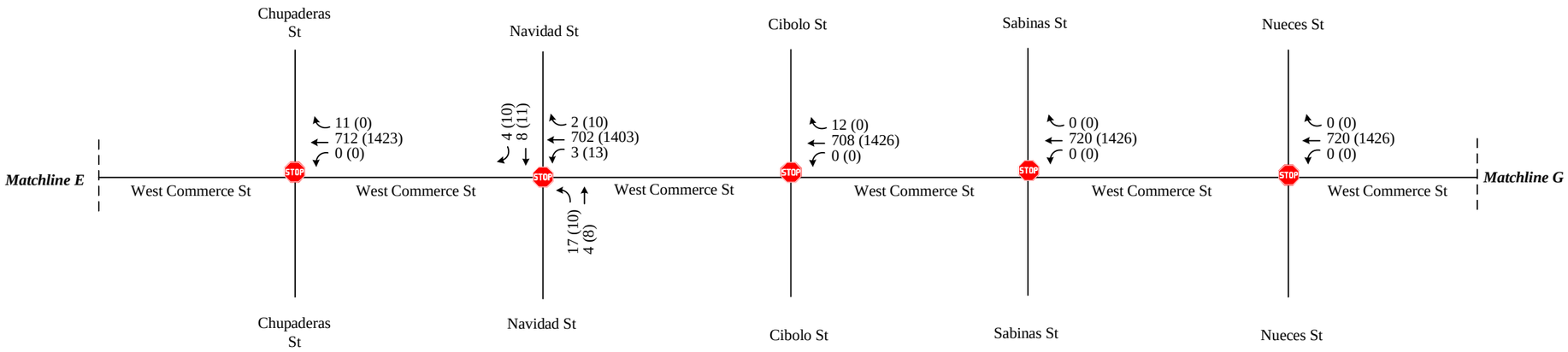

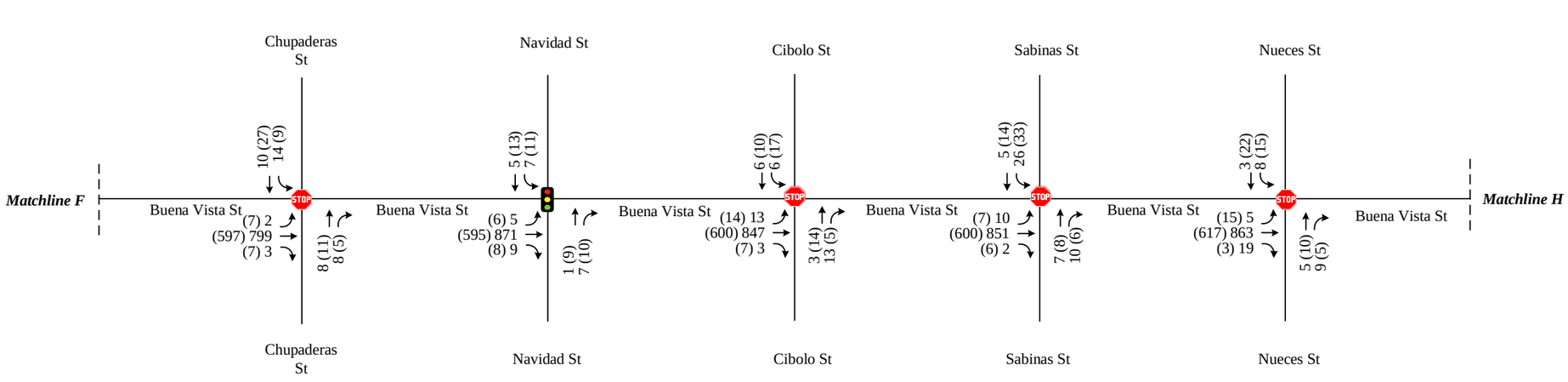

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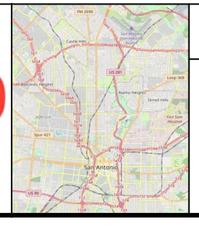

L E G E N D

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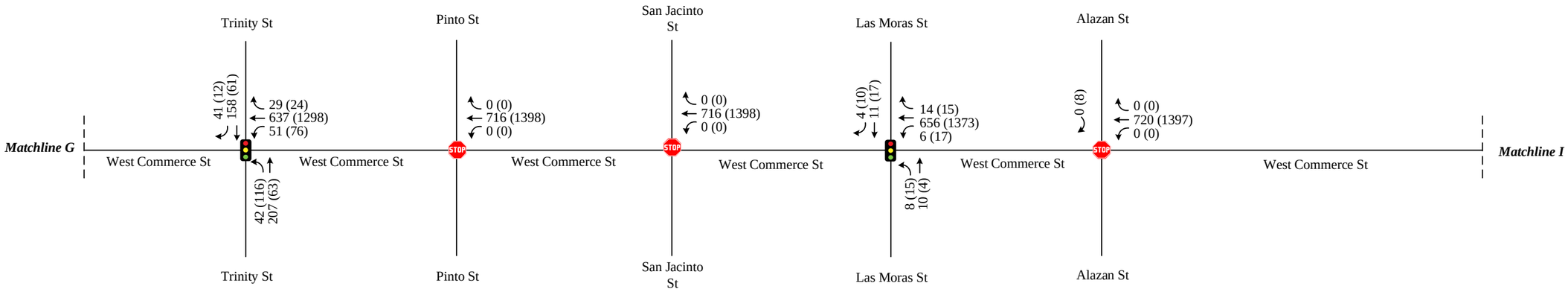

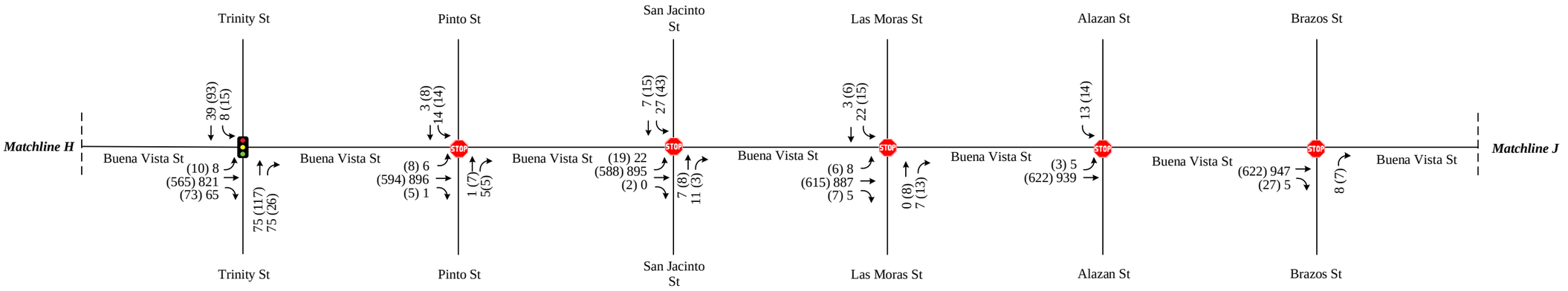

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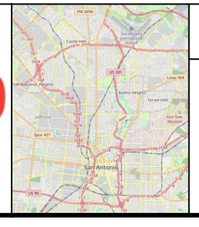

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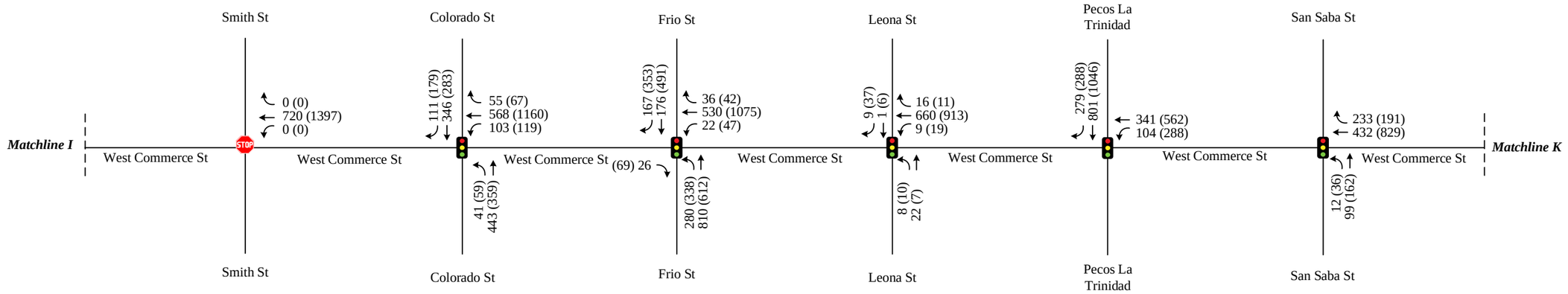

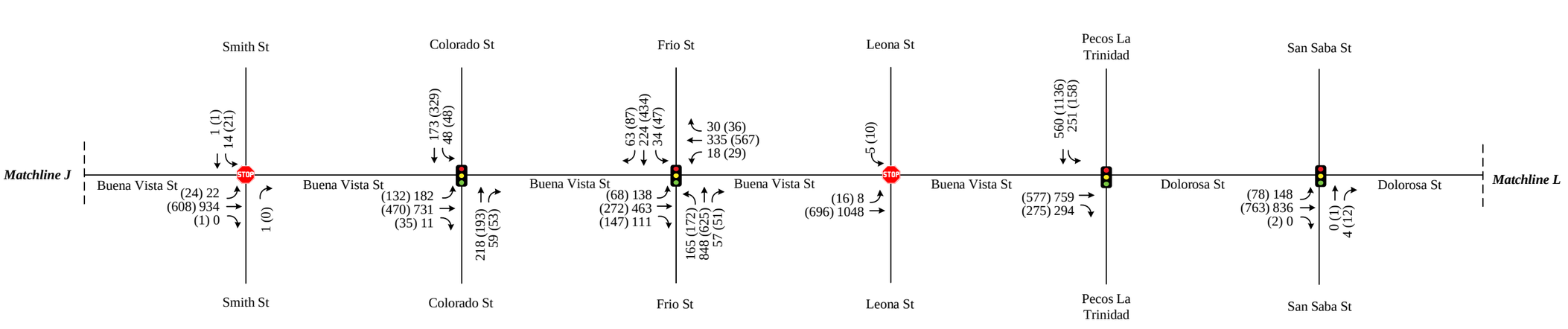

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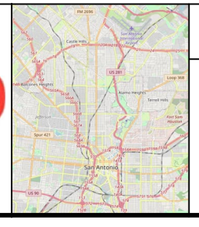

L E G E N D

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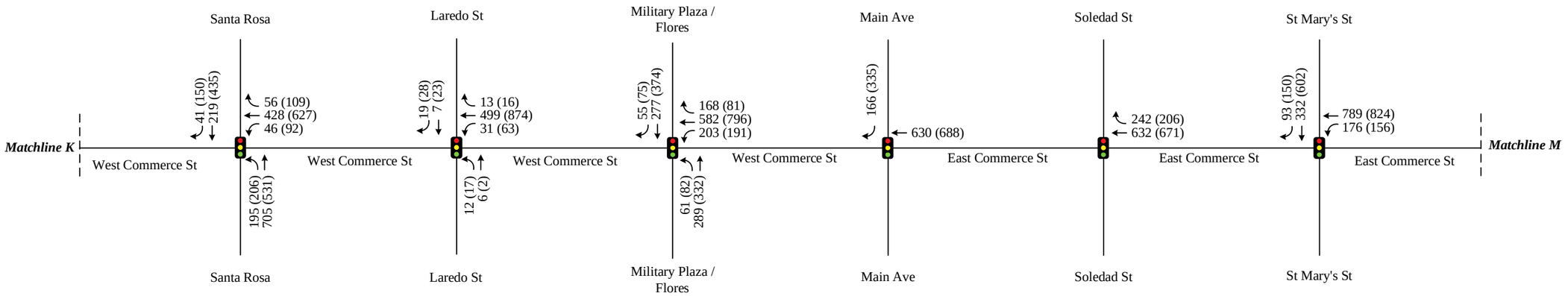

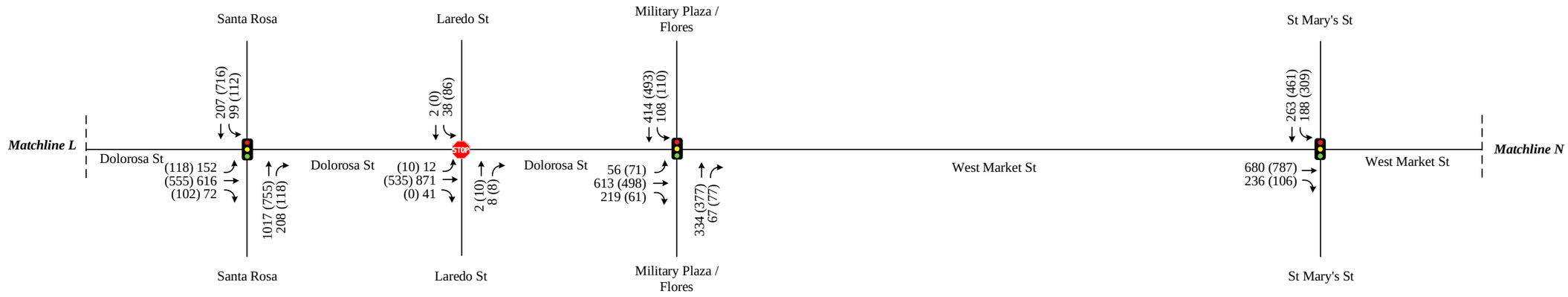

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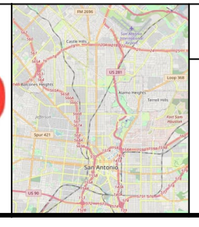

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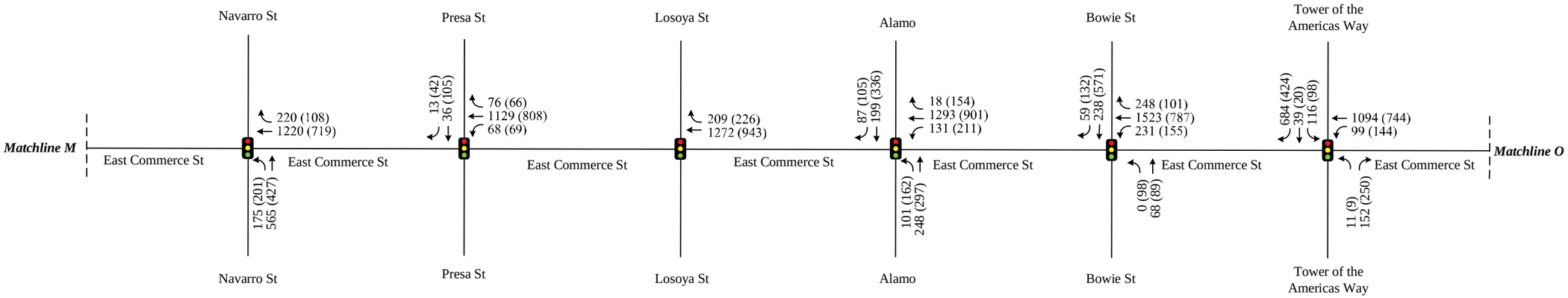

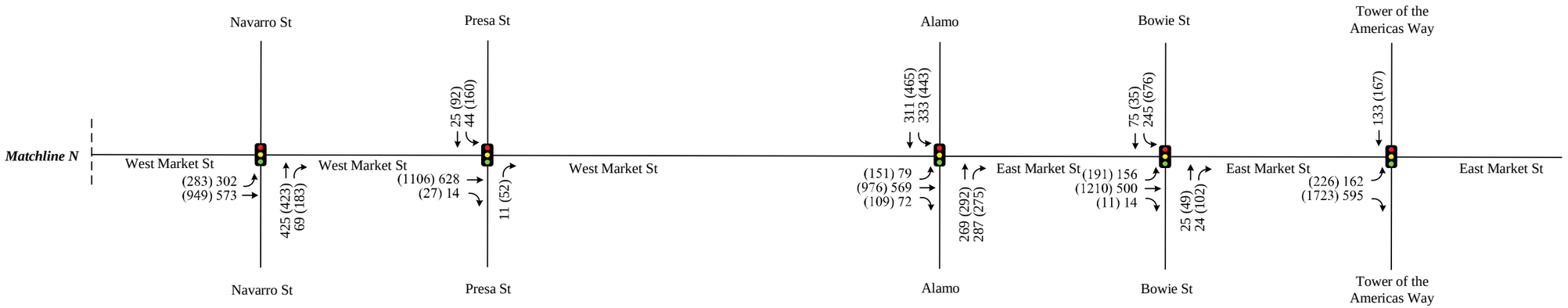

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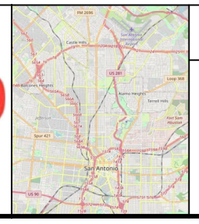

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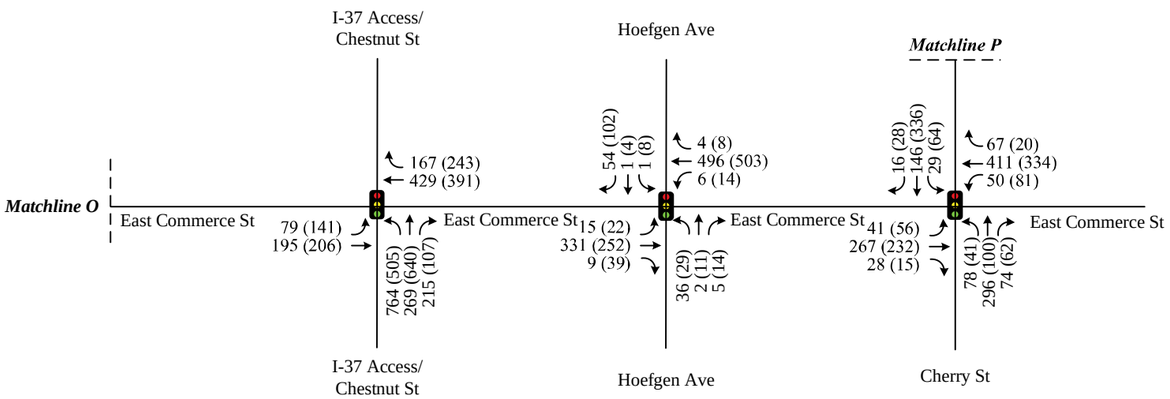

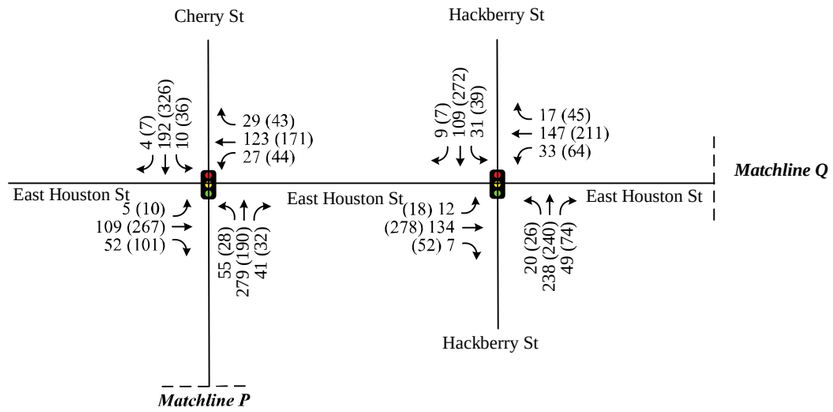

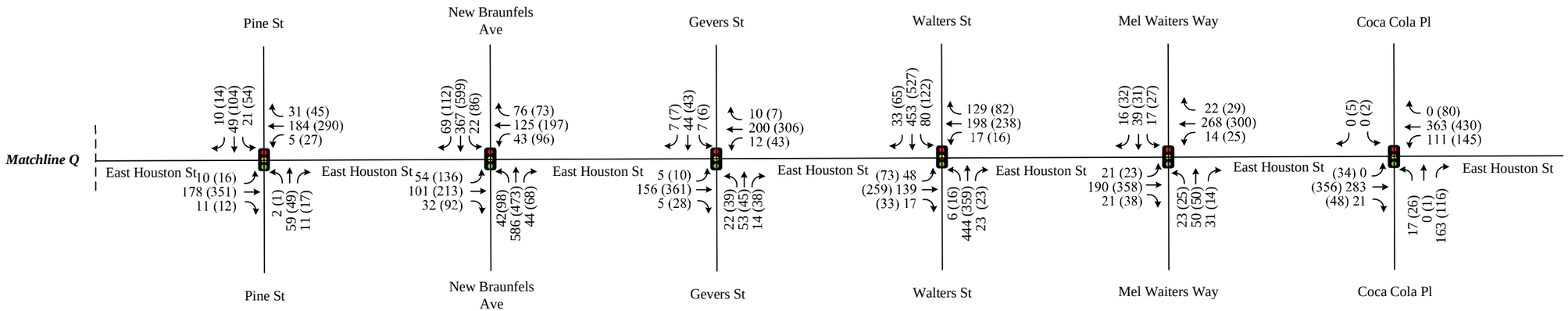

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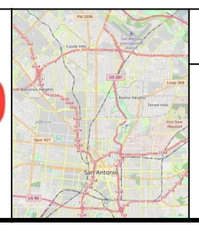

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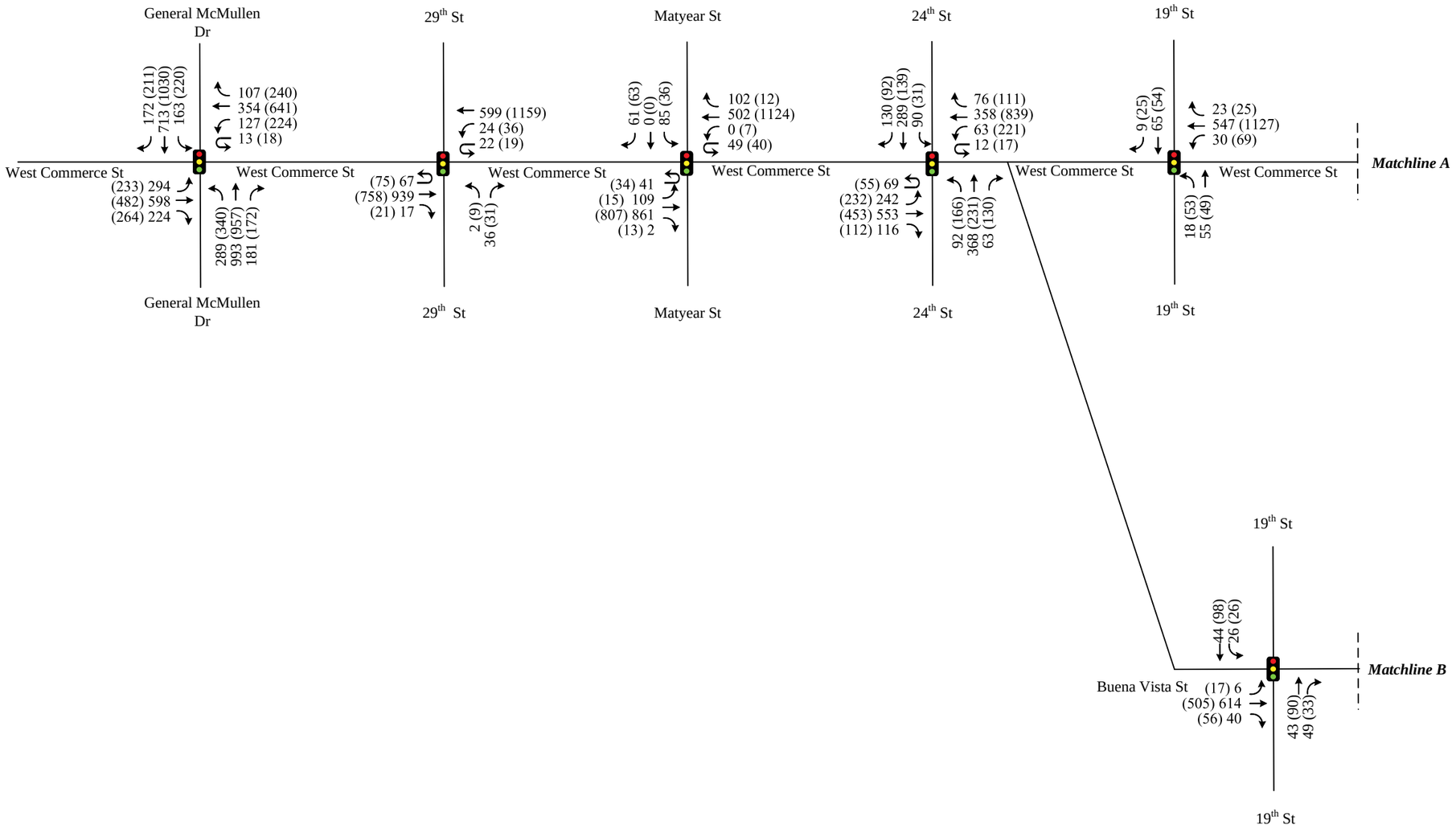

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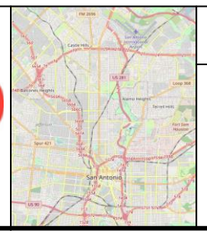

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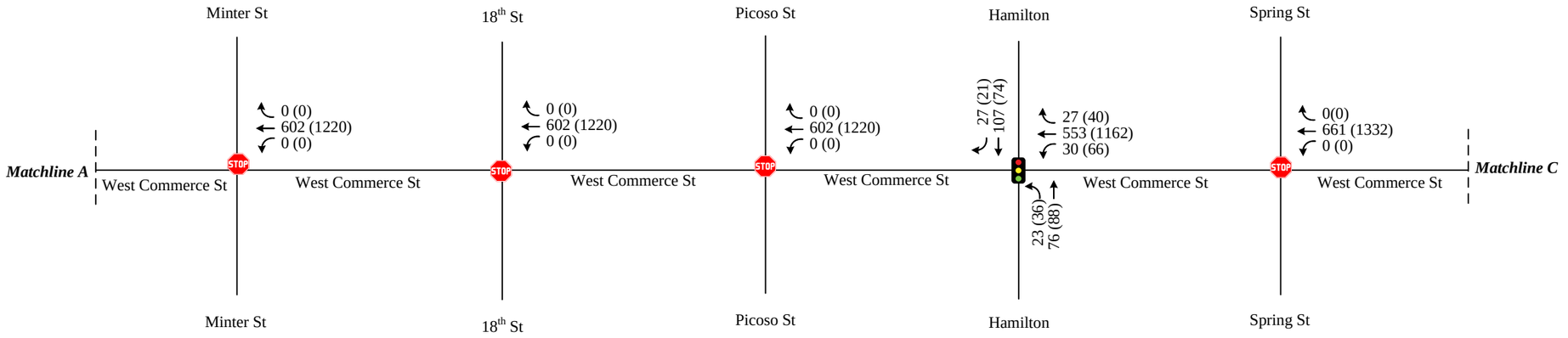

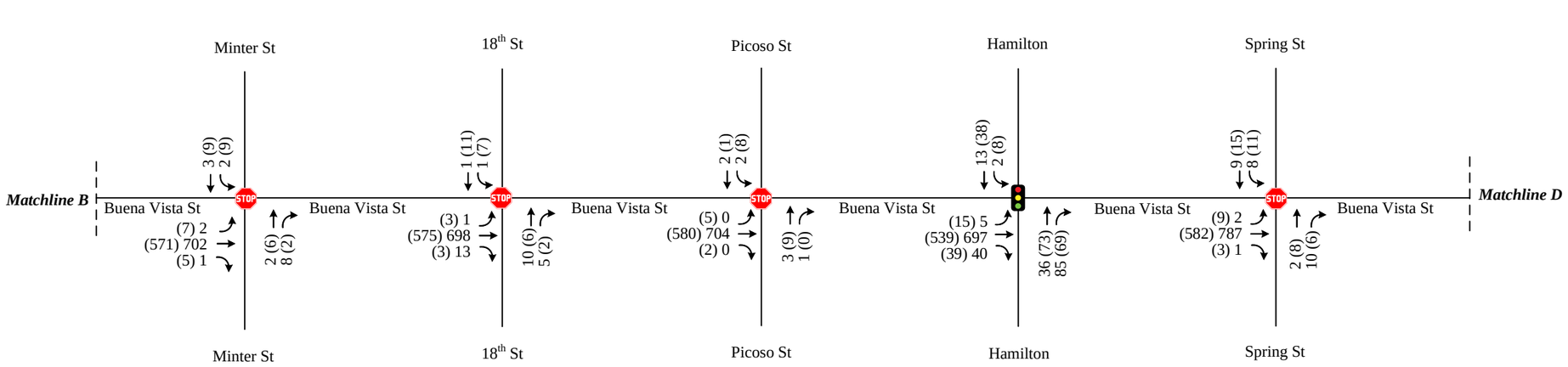

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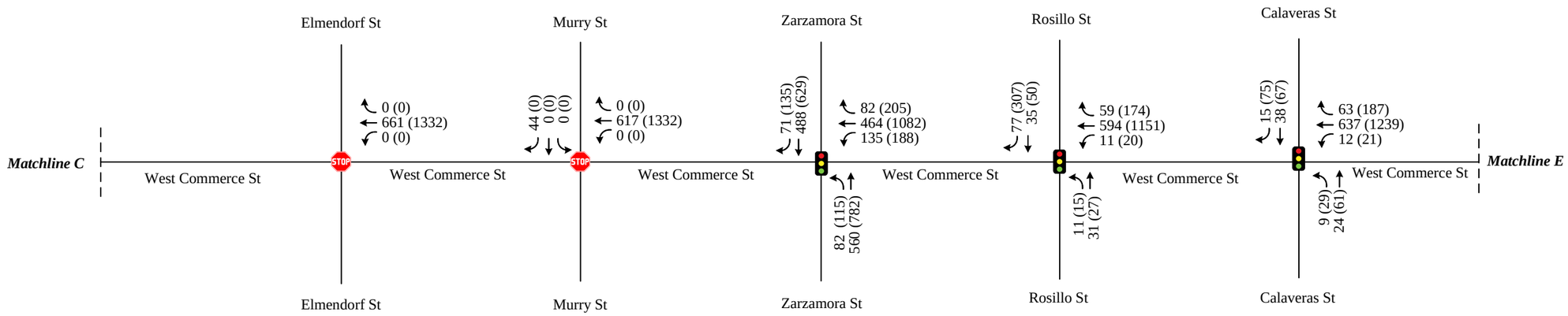

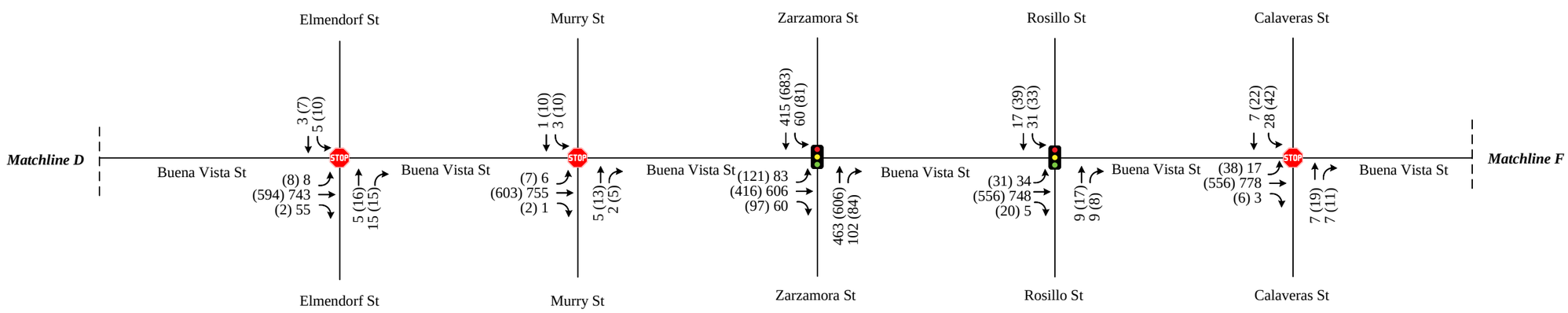

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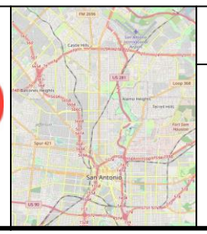

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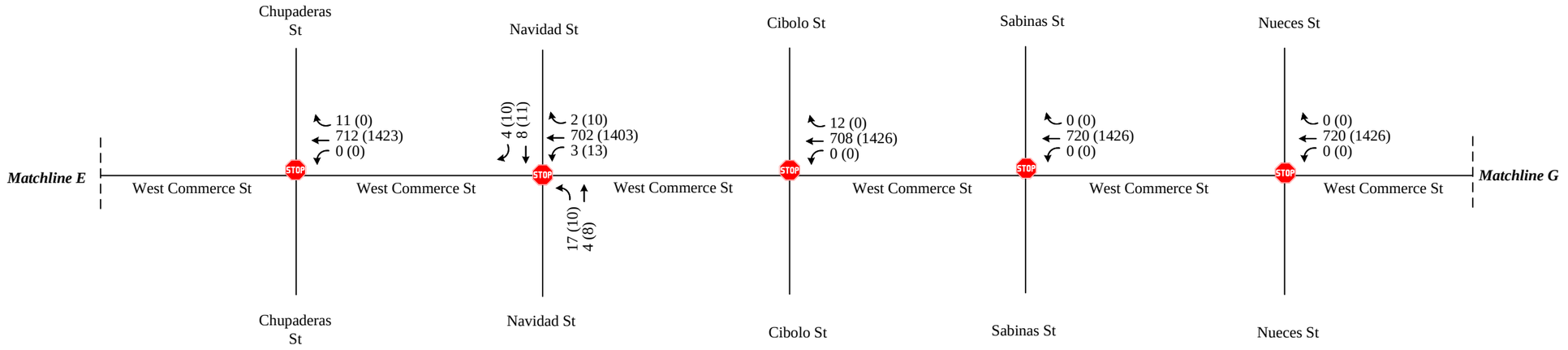

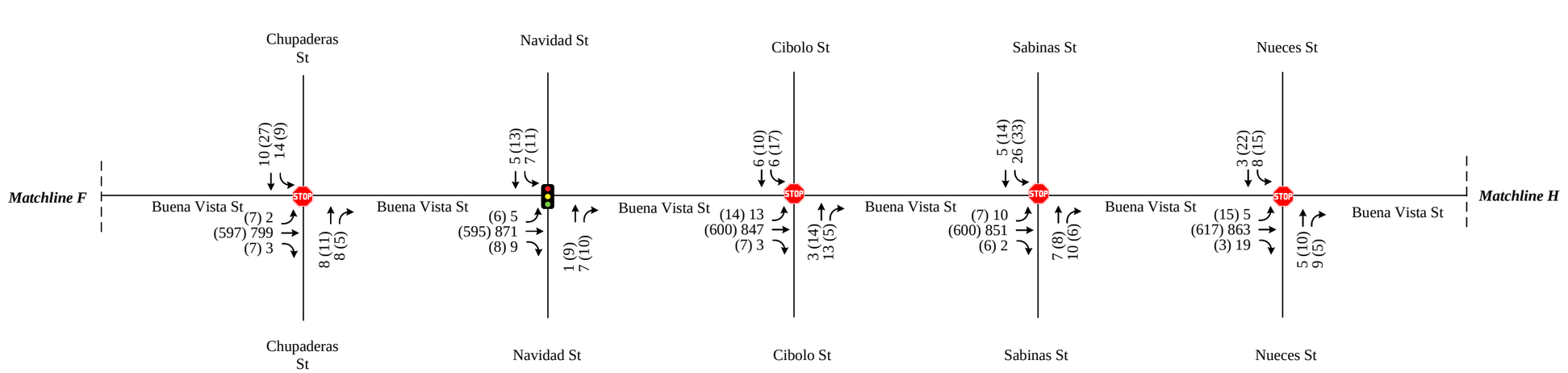

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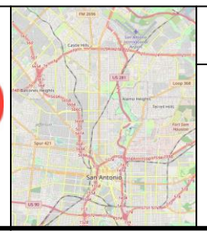

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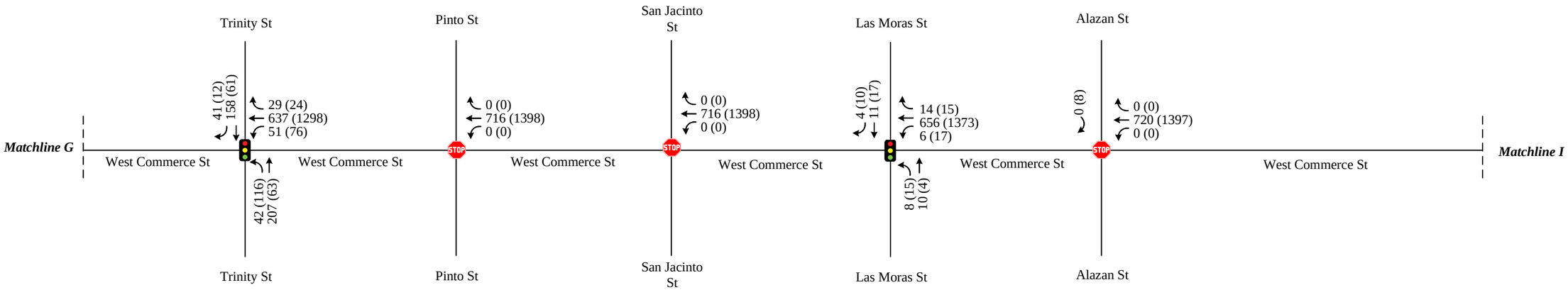

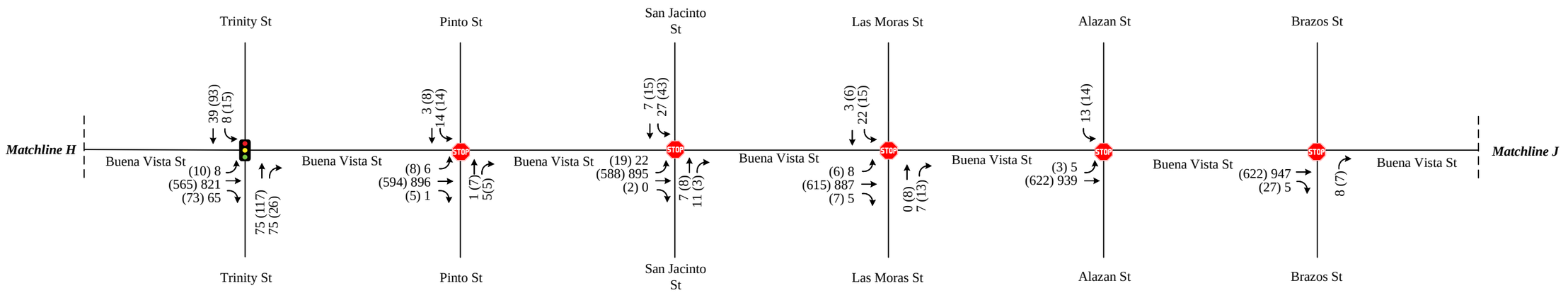

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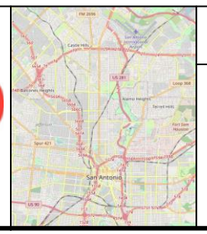

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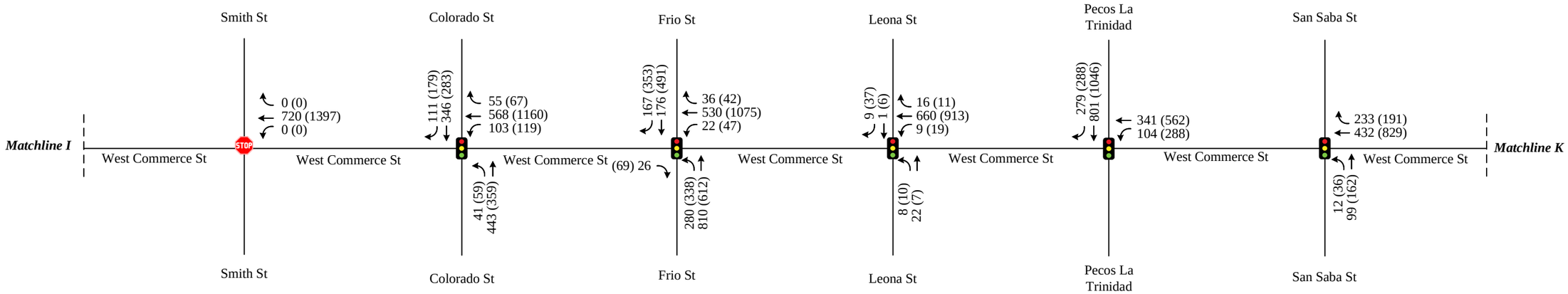

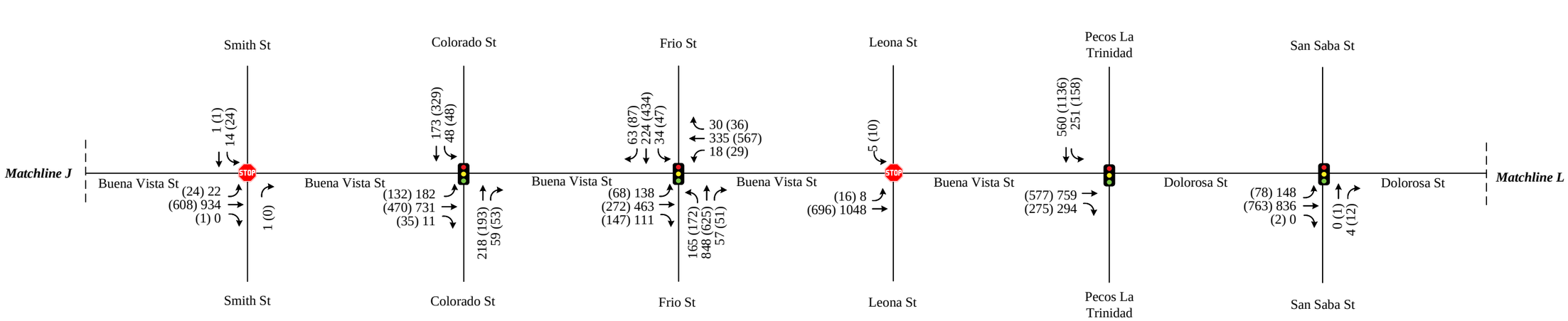

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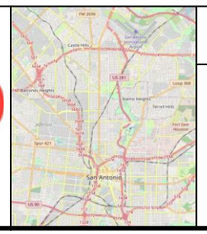

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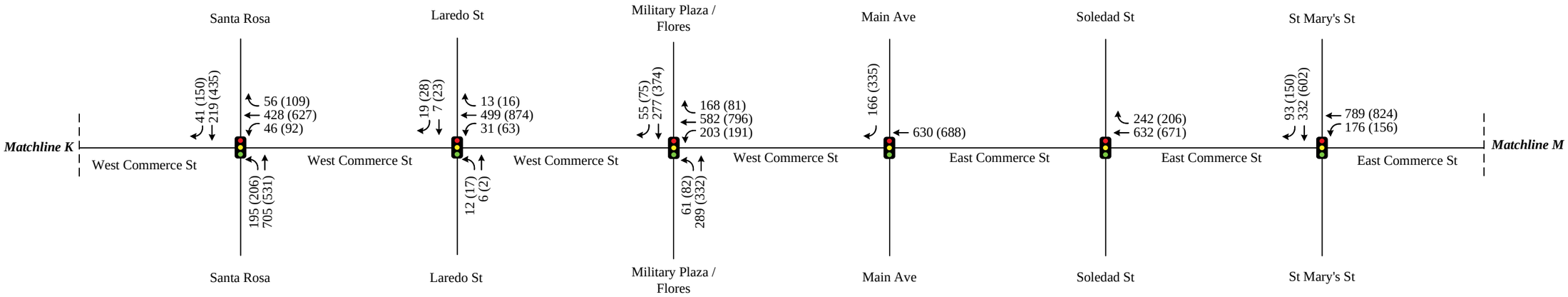

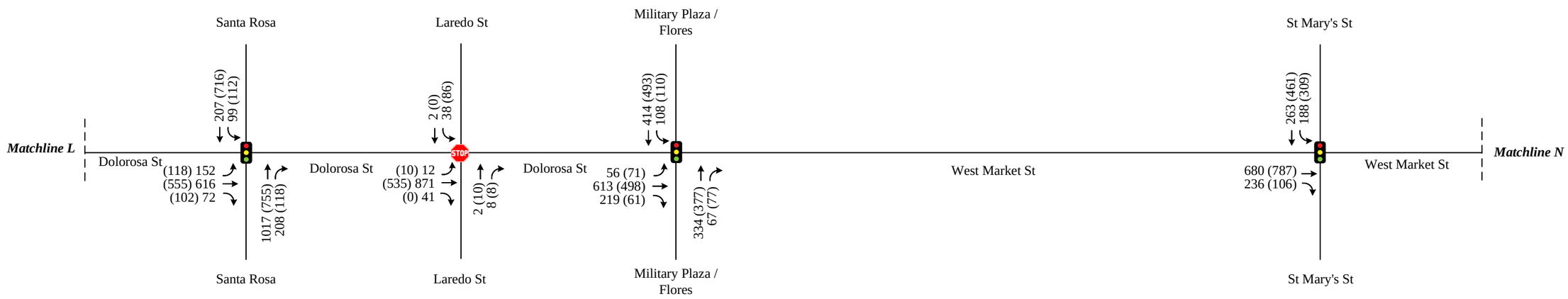

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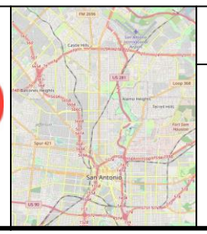

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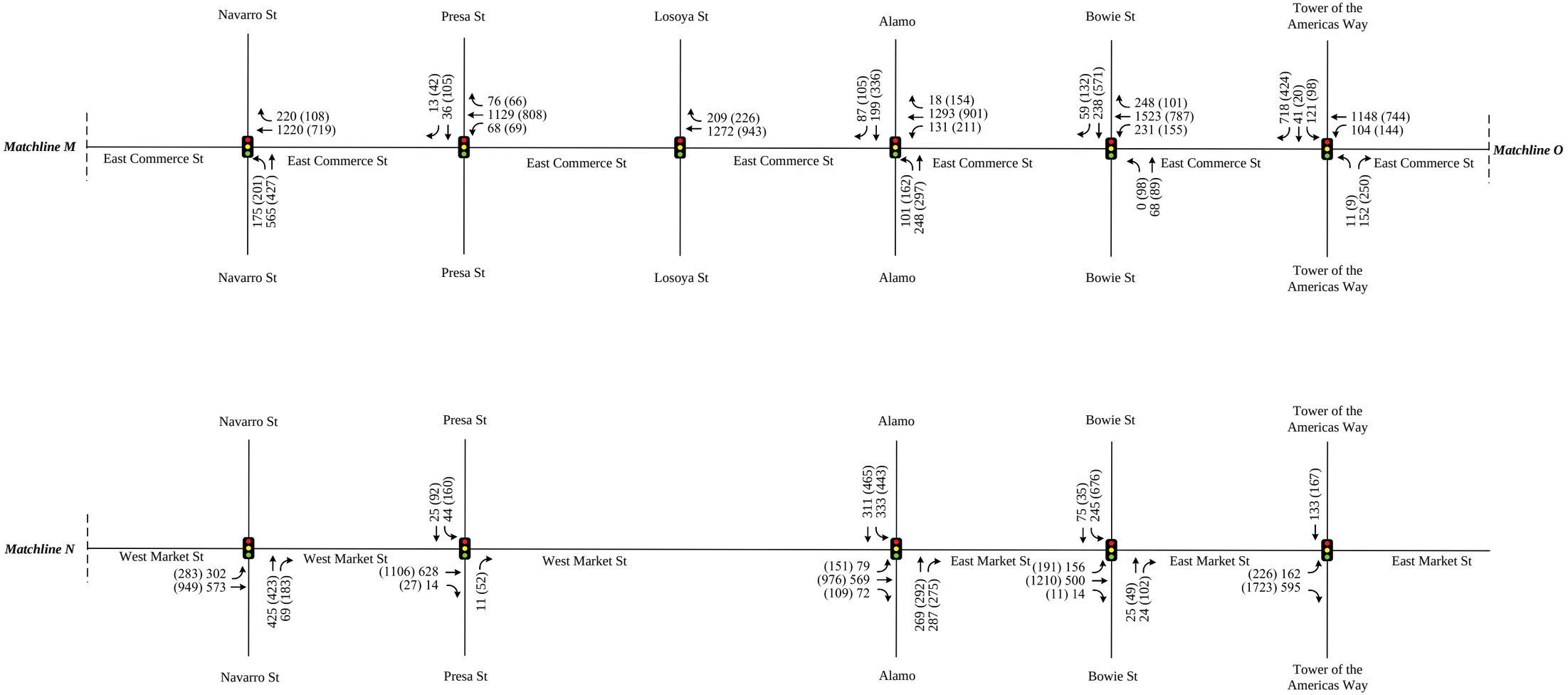

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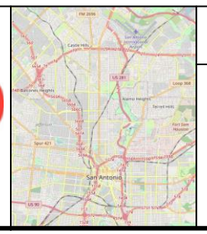

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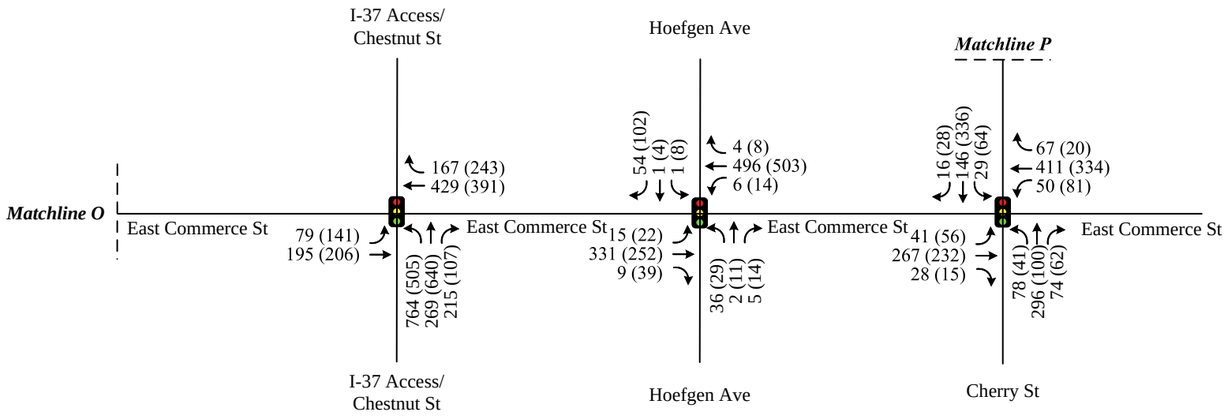

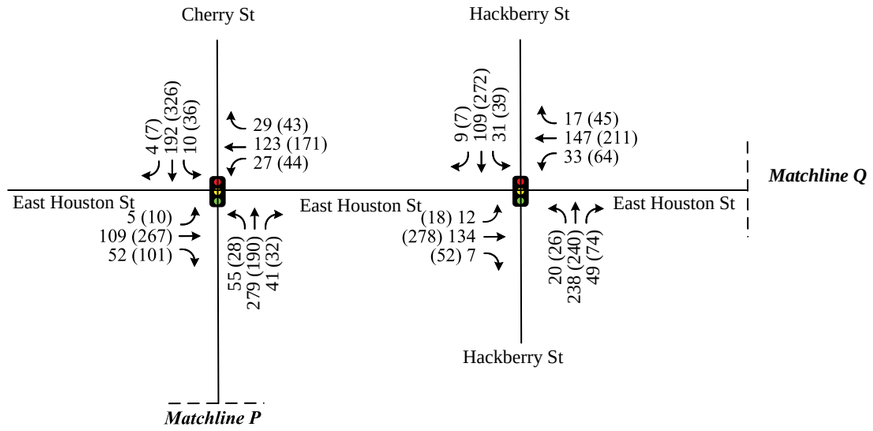

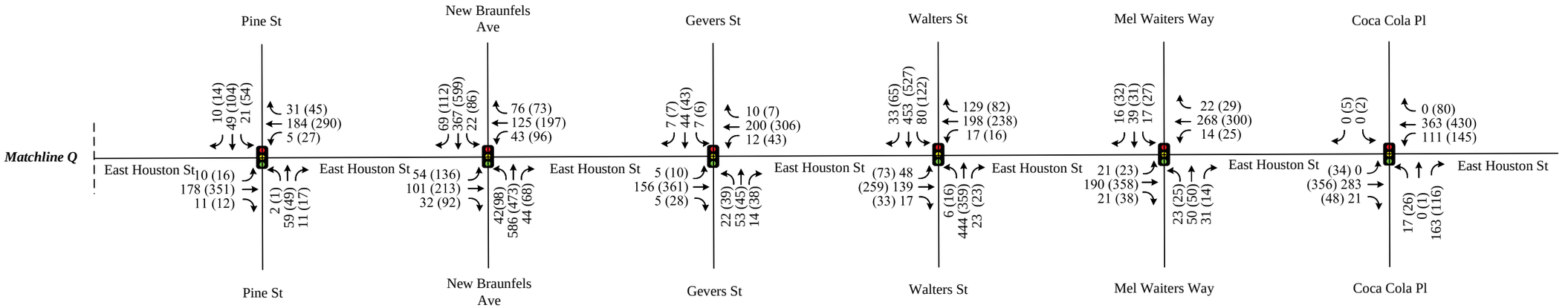

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B. ART E/W PROJECT SCHEMATIC

C. BRT LANE CONFIGURATION AND INTERSECTION ALIGNMENT

BRT Lane Configuration and Intersection Alignment

Right	Mixed	Left	On
			Buena Vista St
			Buena Vista St
			Buena Vista St
			Buena Vista St
Not Signalized			Buena Vista St
			Buena Vista St
			Buena Vista St
Not Signalized			Buena Vista St
			Buena Vista St
			Buena Vista St*
			Buena Vista St
			Buena Vista St
			Dolorosa St
			Dolorosa St*
Not Signalized			Dolorosa St
			Dolorosa St
			Dolorosa St
			Dolorosa St
			Market St
			Market St
			Market St
NA			Market St
			Market St*
			Market St
			Market St

Intersection	On	Center	Left	Mixed	Right
Gen McMullen St	Commerce St				
29th St	Commerce St				
Matyear St	Commerce St				
24th St	Commerce St				
19 th	Commerce St				
Hamilton Ave	Commerce St				
Zarzamora St	Commerce St*				
Rosillo St	Commerce St				
Calaveras St	Commerce St				
Navidad St	Commerce St	Not Signalized			
Trinity St	Commerce St				
Las Moras St	Commerce St				
Colorado St	Commerce St				
Frio St	Commerce St*				
Leona St	Commerce St				
Pecos St	Commerce St				
San Saba St	Commerce St				
Santa Rosa St	Commerce St				
Laredo St	Commerce St				
Flores St	Commerce St				
Main Ave	Commerce St				
Soledad St/Main Plaza	Commerce St				
St Mary's St	Commerce St*				
Navarro St	Commerce St				
Presa St	Commerce St				
Losoya St	Commerce St				
Alamo St	Commerce St*				
Bowie St	Commerce St				
Tower of the Americas Way/SB IH-37 FR	Commerce St				
NB IH-37 FR	Commerce St				
Hoefgen St	Commerce St				
Cherry St	Commerce St*				
Cherry St	Houston St				
Hackberry St	Houston St				
Pine St	Houston St*				
New Braunfels Ave	Houston St				
Gevers St	Houston St				
Walters St	Houston St				
Mel Waiters Way	Houston St				
Coca Cola Place	Houston St				

* Intersection has BRT Lane Transition

D. PHB AND TRAFFIC SIGNAL WARRANTS

MEMO

TO: Project File

FROM: Michael Trueblood, PE, PTOE

SUBJECT: Traffic Signal Warrant Analysis –Commerce St at Rosillo St and Buena Vista St at Rosillo St

DATE: November 20, 2024

Summary

As part of VIA E/W Build project, WSP conducted a signal warrant analysis at the following intersections. The intersections are currently under stop control.

1. Commerce St at Rosillo St
2. Buena Vista St at Rosillo St

The intersections are located in the city of San Antonio. Year 2019 and 2029 traffic volumes were summarized and evaluated in accordance with the Warrants provided in the Texas Manual on Uniform Traffic Control Devices (TMUTCD). The two study intersections are shown in Figure 1.

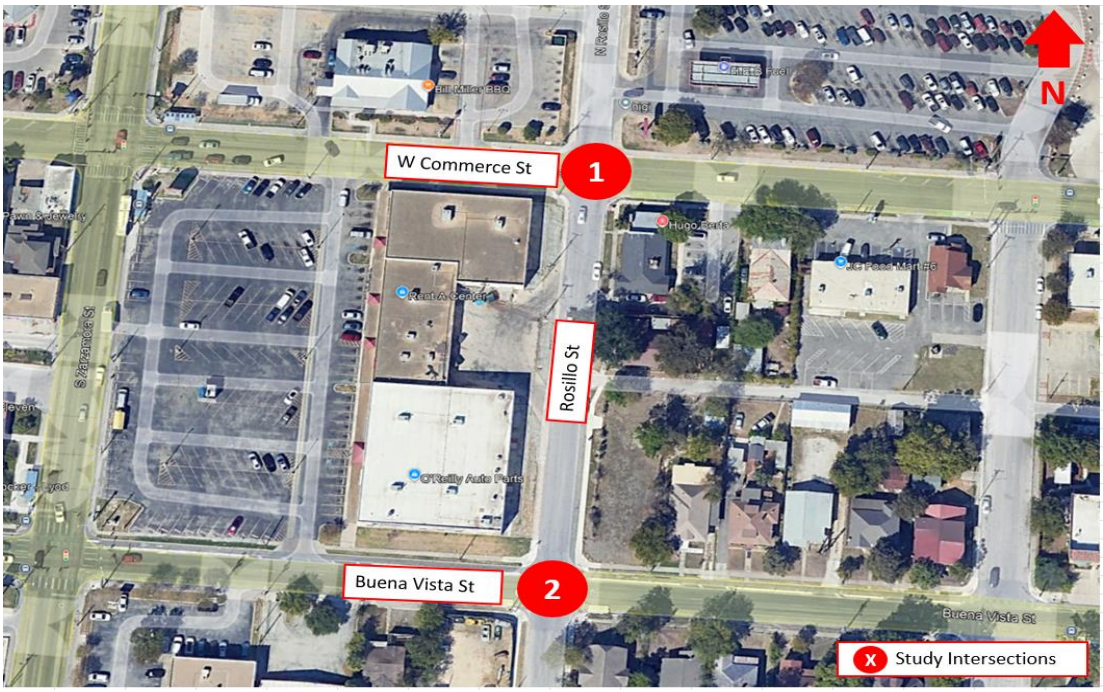


Figure 1: Study Intersection Locations

WSP USA
Suite 325D
1601 S Mopac Expressway
Austin, TX 78746
wsp.com

This Traffic Signal Warrant Study was performed to determine whether the intersections would meet the generally accepted guidelines presented in the Texas Manual on Uniform Traffic Control Devices (TMUTCD) for traffic signal.

The Texas Manual on Uniform Traffic Control Devices (TMUTCD) Signal Warrants 1, 2, 3, 4, 6 and 7 were evaluated. Based on the results of the traffic signal warrant analysis we offer the following conclusions and recommendations:

- **Based on this study, a traffic signal is warranted at the intersection of Commerce St at Rosillo St.**
- **It is recommended to install a traffic signal at Buena Vista St and Rosillo St to enhance driving expectations and improve signal coordination.**

Intersection Features

The project intersections are located in Bexar County in the City of San Antonio, Texas. The population of the urban area is around 200,000. While the major streets Commerce St and Buena Vista St run east-west direction, the minor crossing street Rosillo St runs north-south. The number of lanes for major and minor streets are 2 and 1 respectively. The streets have a speed limit of 35 mph for the major direction and 30 mph for minor direction. No railroad crosses either street within 140 feet of the existing interchange, and it is not located near any school. The existing intersections are four-legged stop-controlled intersections.

Traffic Data

A 15-minute interval intersection turning movement counts (TMC) were performed for a four-hour period from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM on July 18, 2019. The traffic counts were tabulated to calculate hourly and peak hour Traffic volumes.

In addition to the TMCs, hourly traffic profiles were extracted from STARS along the crossing roads to estimate the 24-hour traffic volumes. A growth factor of 1.11 along Commerce St and 1.11 along Buena Vista St were applied to tabulate the 2029 traffic volumes.

The following assumptions are used to develop the traffic volumes for the traffic signal warrant analyses.

- Traffic volumes from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM are used from the TMC counts for Buena Vista St at Rosillo St.
- Traffic counts were not available for the Commerce at Rosillo intersection. The volumes were estimated based on available counts from adjacent intersections, along with the ped counts.
- To estimate the 8-hour traffic volume on the major and minor approach,
    - The available 24-hr STAR traffic volume profile for major and minor street of surrounding network is used to develop a 24hr volume profile.
    - Develop a factor – a ratio of the average peak period counts to the corresponding peak period of the STARS counts.
    - Apply the factor to the 24hr volume STARS profile to calculate the traffic volumes.

The four-hour vehicular and ped volumes, crash data tables, STARS volume data, and estimated 24-hours traffic volumes for each intersection approach that are used for the analyses are included in **Appendix A.**

Signal Warrant Analysis

A Traffic Signal Warrant Analysis was performed to determine the warrant for the installation of a fully operational traffic signal at the intersection that would meet generally accepted guidelines outlined in the Texas Manual for Uniform Traffic Control Devices (TMUTCD), Chapter 4C.

The TMUTCD cites eight different signal warrants to determine the installation of a traffic control signal justification at a particular location. For the purpose of this analyses, warrants 1, 2, 3, 4, 6 and 7 are checked for traffic warrant. The warrants and their application as shown in the TMUTCD are listed below:

Warrant 1: Eight-Hour Vehicular Volume

The Minimum Vehicular Volume, Condition A, is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal. Minimum volume criteria must be met for 8 hours of the day for the major street and minor street approaches.

The Interruption of Continuous Traffic, Condition B, is intended for application where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict entering or crossing the major street. Minimum volume criteria must be met for 8 hours of the day for the major street and minor street approaches.

Eight-Hour Vehicular Volume normally requires that the traffic volumes meet the minimum vehicles per hour shown in the 100 percent columns of Condition A or B in Table 4C-1 of the TMUTCD for 8 hours of an average day or 80% of both Condition A and B met.

Warrant 2: Four-Hour Vehicular Volume

Intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic control signal. Minimum volume criteria must be met for 4 hours of the day for the major street and minor street approaches.

Four-Hour Vehicular Volume normally requires that the plotted points for 4 separate hours representing the vehicles per hour on the major and minor streets exceed the applicable curve shown in TMUTCD Figure 4C-1.

Warrant 3: Peak Hour

Intended for use at a location where traffic conditions are such that for a minimum of one hour of an average day, the minor street traffic suffers undue delay entering or crossing the major street. There are two conditions offered for this warrant. If either condition is met, then Warrant 3 is satisfied.

Condition A – If the delay of the controlled minor-street approach exceeds 4 hours and the minor-street approach volume is at least 100 vehicles per hour and the total entering volume is at least 800 vehicles per hour then Warrant 3A is met. No data available for this warrant and it has not been assessed,

Condition B – Minimum volume criteria must be met for 1 hour of the day for the major street and minor street approaches.

Warrant 3 is satisfied when either Condition A or B is met.

Warrant 4: Pedestrian Volume
Intended for application where the traffic volume on a major street is so heavy that pedestrians experience excessive delay in crossing the major street. There are two conditions offered for this warrant. If either condition is met, then Warrant 4 is satisfied.
Condition A - Four-Hour Pedestrian Volume normally requires that the plotted points for 4 separate hours representing the vehicles per hour on the major and minor streets exceed the applicable curve shown in TMUTCD Figure 4C-5.

Condition B – Minimum volume criteria must be met for 1 hour of the day for the major street and minor street approaches, with one plotted point exceeding the applicable curve shown in TMUTCD Figure 4C-7.

Warrant 6: Coordinated Signal System
Intended for application where an engineering study finds that one of the following criteria is met:
A - On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.
B - On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning, and the proposed and adjacent traffic control signals will collectively provide a progressive operation.

The Coordinated Signal System signal warrant should not be applied where the resultant spacing of traffic control signals would be less than 1,000 feet.

Warrant 7: Crash Experience
Intended for application where the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal. There are three conditions offered for this warrant. If all the conditions are met, then Warrant 7 is satisfied.
Condition A - Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.
Condition B - Five or more reported crashes, of types susceptible to correction by a traffic control signal, have occurred within a 12-month period, each crash involving personal injury or property damage.
Condition C - Minimum volume criteria must be met for any 8 hours of the day for the major street and minor street approaches.

For the existing geometry analysis, the thresholds for the above Warrants were checked. The results presented in **Table 1** indicate which warrants are met for each intersection. As shown, Warrants 1, 2 and 3 are met for Commerce at Rosillo intersection for the years 2019 and 2029. The signal warrant worksheets are attached in **Appendix B** of this memo.

Table 1. Signal Warrant Analysis Results

Warrant	Description	Intersections			
		Commerce at Rosillo		Buena Vista at Rosillo	
		2019	2029	2019	2029
Warrant 1A	Eight-Hour Vehicular Volume	Satisfied	Satisfied	Not Satisfied	Not Satisfied
Warrant 1B	Eight-Hour Vehicular Volume	Satisfied	Satisfied	Not Satisfied	Not Satisfied
Warrant 2	Four-Hour Vehicular Volume	Satisfied	Satisfied	Not Satisfied	Not Satisfied
Warrant 3A	Peak Hour	NA	NA	NA	NA
Warrant 3B	Peak Hour	Satisfied	Satisfied	Not Satisfied	Not Satisfied
Warrant 4A	Pedestrian Volume	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
Warrant 4B	Pedestrian Volume	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
Warrant 5	School Crossing	NA	NA	NA	NA
Warrant 6A	Coordinated Signal System	NA	NA	NA	NA
Warrant 6B	Coordinated Signal System	NA	NA	NA	NA
Warrant 7A	Crash Experience	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
Warrant 7B	Crash Experience	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
Warrant 7C	Crash Experience	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
Warrant 8A	Roadway Network	NA	NA	NA	NA
Warrant 8B	Roadway Network	NA	NA	NA	NA
Warrant 9	Intersection Near a Grade Crossing	NA	NA	NA	NA
Signal		Warrants	Warrants	X	X

Based on the review of the warrants, **the Commerce at Rosillo intersection warrants a traffic signal**.

Recommendations

Based on the traffic volumes and assumptions documented in this memo, Warrant 1 (8-hour volumes), Warrant 2(4-hour volumes), and Warrant 3 (Peak hour volume) were met at the intersection of Commerce St and Rosillo St, justifying the installation of a traffic signal at this location.

Conversely, none of the warrants were met at the intersection of Buena Vista St and Rosillo St based on the available traffic data, forecasts, and crash data. However, it is recommended to install a traffic signal at this intersection to align with driver expectations for consistent traffic control measures along Rosillo St if a signal is installed at Commerce St and Rosillo St. Owing to the close proximity of Buena Vista St at Rosillo St to Commerce St at Rosillo St, installation of a traffic signal at Buena Vista St and Rosillo St will potentially improve signal coordination along eastbound Buena Vista St; thus, leading to synchronized traffic flow and reduced delays.

Appendix A – 24HR Estimated Traffic Volumes

Count at intersection - 2019

	Minor	Major
	Rosillo St	BUENA VISTA
7:00 AM	66	885
8:00 AM	73	657
4:00 PM	98	622
5:00 PM	78	625

Count at intersection - 2019

	Minor	Major
	Rosillo St	W COMMERCE
7:00 AM	114	604
8:00 AM	155	686
4:00 PM	289	1249
5:00 PM	279	1354

Count at intersection - 2029

	Minor	Major
	Rosillo St	BUENA VISTA
7:00 AM	75	1009
8:00 AM	83	749
4:00 PM	112	709
5:00 PM	89	713

Count at intersection - 2029

	Minor	Major
	Rosillo St	W COMMERCE
7:00 AM	127	670
8:00 AM	172	761
4:00 PM	321	1386
5:00 PM	310	1503

Ped Counts - 2019

	Minor	Major
	Rosillo St	BUENA VISTA
7:00 AM	3	4
8:00 AM	5	2
4:00 PM	8	3
5:00 PM	5	6

Ped Counts - 2019

	Minor	Major
	Rosillo St	W COMMERCE
7:00 AM	2	2
8:00 AM	2	5
4:00 PM	6	15
5:00 PM	21	14

Ped Counts - 2029

	Minor	Major
	Rosillo St	BUENA VISTA
7:00 AM	3	5
8:00 AM	6	2
4:00 PM	9	3
5:00 PM	6	7

Ped Counts - 2029

	Minor	Major
	Rosillo St	W COMMERCE
7:00 AM	2	2
8:00 AM	2	6
4:00 PM	7	17
5:00 PM	23	16

Extracted 24-hr STARS Traffic Volume Data

	Minor		Major	
	N ZARZAMORA ST	S ZARZAMORA ST	BUENA VISTA	W COMMERCE
6:00 AM	563	489	420	194
7:00 AM	996	717	678	253
8:00 AM	1153	848	506	364
9:00 AM	924	889	397	422
10:00 AM	1047	999	395	485
11:00 AM	1024	1135	431	540
12:00 PM	1079	1265	525	635
1:00 PM	1097	1132	519	592
2:00 PM	1081	1173	472	622
3:00 PM	1163	1263	527	703
4:00 PM	1449	1305	504	810
5:00 PM	1417	1269	479	885
6:00 PM	1132	1153	417	594
7:00 PM	800	1037	405	470
8:00 PM	620	868	356	421
9:00 PM	483	626	255	288
10:00 PM	323	432	175	204
11:00 PM	206	310	120	145
12:00 AM	144	183	72	78
1:00 AM	98	126	48	51
2:00 AM	70	98	30	33
3:00 AM	64	73	36	31
4:00 AM	114	116	45	49
5:00 AM	282	253	150	99

Estimated 24-hr Volumes - 2019

	Minor	Major
	Rosillo St	BUENA VISTA
6:00 AM	36	541
7:00 AM	59	873
8:00 AM	69	651
9:00 AM	62	511
10:00 AM	70	508
11:00 AM	74	555
12:00 PM	80	676
1:00 PM	77	668
2:00 PM	77	607
3:00 PM	83	678
4:00 PM	95	649
5:00 PM	92	616
6:00 PM	79	537
7:00 PM	63	521
8:00 PM	51	458
9:00 PM	38	328
10:00 PM	26	225
11:00 PM	18	154
12:00 AM	11	93
1:00 AM	8	62
2:00 AM	6	39
3:00 AM	5	46
4:00 AM	8	58
5:00 AM	18	193

Estimated 24-hr Volumes - 2019

	Minor	Major
	Rosillo St	W COMMERCE
6:00 AM	96	327
7:00 AM	157	426
8:00 AM	183	613
9:00 AM	166	711
10:00 AM	187	817
11:00 AM	197	909
12:00 PM	214	1069
1:00 PM	204	997
2:00 PM	206	1047
3:00 PM	221	1184
4:00 PM	252	1364
5:00 PM	245	1490
6:00 PM	209	1000
7:00 PM	168	791
8:00 PM	136	709
9:00 PM	101	485
10:00 PM	69	344
11:00 PM	47	244
12:00 AM	30	131
1:00 AM	20	86
2:00 AM	15	56
3:00 AM	13	52
4:00 AM	21	83
5:00 AM	49	167

Estimated 24-hr Volumes - 2029

	Minor	Major
	Rosillo St	BUENA VISTA
6:00 AM	41	616
7:00 AM	67	995
8:00 AM	79	742
9:00 AM	71	582
10:00 AM	80	580
11:00 AM	85	632
12:00 PM	92	770
1:00 PM	87	761
2:00 PM	88	693
3:00 PM	95	773
4:00 PM	108	739
5:00 PM	105	703
6:00 PM	90	612
7:00 PM	72	594
8:00 PM	58	522
9:00 PM	43	374
10:00 PM	30	257
11:00 PM	20	176
12:00 AM	13	106
1:00 AM	9	70
2:00 AM	7	44
3:00 AM	5	53
4:00 AM	9	66
5:00 AM	21	220

Estimated 24-hr Volumes - 2029

	Minor	Major
	Rosillo St	W COMMERCE
6:00 AM	107	363
7:00 AM	174	473
8:00 AM	203	680
9:00 AM	184	789
10:00 AM	207	906
11:00 AM	219	1009
12:00 PM	237	1187
1:00 PM	226	1106
2:00 PM	228	1163
3:00 PM	246	1314
4:00 PM	279	1514
5:00 PM	272	1654
6:00 PM	232	1110
7:00 PM	186	878
8:00 PM	151	787
9:00 PM	112	538
10:00 PM	76	381
11:00 PM	52	271
12:00 AM	33	146
1:00 AM	23	95
2:00 AM	17	62
3:00 AM	14	58
4:00 AM	23	92
5:00 AM	54	185

CRASH TABLES FOR BUENA VISTA AT ROSILLO ST

Crash Severity Summary

Year	Fatal	Serious Injury	Minor Injury	Possible Injury	Not Injury	Unknown	Total	Percentage
2019					4		**5**	*21.7%*
2020				1	3		**4**	*17.4%*
2021					6		**6**	*26.1%*
2022			1		2	1	**3**	*13.0%*
2023				2	3		**5**	*21.7%*
Total	**0**	**0**	**1**	**3**	**18**	**1**		
Percentage	*0.0%*	*0.0%*	*4.3%*	*13.0%*	*78.3%*	*4.3%*		
Total Crashes							**23**	

Collision Type Crash Summary

Year	Angle	Head On	Other	Rear End	Side Swipe	SMV	Left Turn	Right Turn	Total	Percentage
2019					1		4		**5**	21.7%
2020							4		**4**	17.4%
2021	4						2		**6**	26.1%
2022				1	1	1			**3**	13.0%
2023	1				1	1	2		**5**	21.7%
Total	**5**	**0**	**0**	**1**	**3**	**2**	**12**	**0**		
Percentage	*21.7%*	*0.0%*	*0.0%*	*4.3%*	*13.0%*	*8.7%*	*52.2%*	*0.0%*		
Total Crashes									**23**	

Pedestrian and Cycle Crashes

Year	Vehicle	Pedestrian	Cyclist	Total	Percentage
2019	5			**5**	21.7%
2020	4			**4**	17.4%
2021	6			**6**	26.1%
2022	3			**3**	13.0%
2023	5			**5**	21.7%
Total	**23**	**0**	**0**		
Percentage	*100.0%*	*0.0%*	*0.0%*		
Total Crashes				**23**	

CRASH TABLES FOR COMMERCE AT ROSILLO ST

Crash Severity Summary

Year	Fatal	Serious Injury	Minor Injury	Possible Injury	Not Injury	Unknown	Total	Percentage
2019					2		**2**	8.3%
2020					8		**8**	33.3%
2021			1	1	3	1	**6**	25.0%
2022				2	2		**4**	16.7%
2023			1	1	2		**4**	16.7%
Total	**0**	**0**	**2**	**4**	**17**	**1**		
Percentage	*0.0%*	*0.0%*	*8.3%*	*16.7%*	*70.8%*	*4.2%*		
Total Crashes						**24**		

Collision Type Crash Summary

Year	Angle	Head On	Other	Rear End	Side Swipe	SMV	Left Turn	Right Turn	Total	Percentage
2019	2								**2**	8.3%
2020	6			1				1	**8**	33.3%
2021	3				1	2			**6**	25.0%
2022	3					1			**4**	16.7%
2023	1					1	2		**4**	16.7%
Total	**15**	**0**	**0**	**1**	**1**	**4**	**2**	**1**		
Percentage	*62.5%*	*0.0%*	*0.0%*	*4.2%*	*4.2%*	*16.7%*	*8.3%*	*4.2%*		
Total Crashes									**24**	

Pedestrian and Cycle Crashes

Year	Vehicle	Pedestrian	Cyclist	Total	Percentage
2019	2			**2**	8.3%
2020	8			**8**	33.3%
2021	6			**6**	25.0%
2022	3		1	**4**	16.7%
2023	4			**4**	16.7%
Total	**23**	**0**	**1**		
Percentage	*95.8%*	*0.0%*	*4.2%*		
Total Crashes				**24**	

Appendix B – Traffic Warrant Analyses Worksheets

Traffic Survey - Count Analysis

2011 TMUTCD Warrants

County: Bexar District: San Angelo

City: San Antonio Population: 200,000 Survey Date: 7/18/2019

	Route #	Name	Control	Section	85% Speed
Major	0	Buena Vista St			35 MPH
Minor	0	Rosillo St			30 MPH

Eight Highest Hours: Include the same 8 hours for the Major and Minor St. volumes.

Time Ends	Major St. - Both App.		Minor St. - Hi. Vol. App.	
	Veh. Total	Ped. Total	Veh. Total	Ped. Total
8:00 AM	873	3	59	
4:00 PM	678	0	83	
1;00 PM	676	0	80	
2:00 PM	668	0	77	
5:00 PM	649	8	95	
9:00 AM	651	5	69	
6:00 PM	616	5	92	
3:00 PM	607	0	77	

Comments:

Analysis period- 2019

Recommendation- A Traffic signal is recommended at this intersection.

Warrant 1. Eight Hour Vehicular Volume

☐ Yes ☒ No Meets 70%[c] (major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition A.

- or -

☐ Yes ☒ No Meets 70%[c] (major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition B.

- or -

☐ Yes ☒ No Meets 80%[b] of Conditions A and B.

- or -

☐ Yes ☒ No Meets 56%[d] of Conditions A and B (major-street speed exceeds 40 mph or population less than 10,000).

Condition A - Minimum Vehicle Volume

Number of Lanes		Vehicles per hour on Major St. (Total of both Approaches)					Vehicles per hour on higher-volume Minor St. approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	101.2%	100%[a]	80%[b]	70%[c]	56%[d]	51.3%
1	1	500	400	350	280	0	150	120	105	84	0
2 or more	1	600	480	420	336	607	150	120	105	84	77
2 or more	2 or more	600	480	420	336	0	200	160	140	112	0
1	2 or more	500	400	350	280	0	200	160	140	112	0

Condition B - Interruption of Continuous Traffic

Number of Lanes		Vehicles per hour on Major St. (Total of both Approaches)					Vehicles per hour on higher-volume Minor St. approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	67.4%	100%[a]	80%[b]	70%[c]	56%[d]	102.7%
1	1	750	600	525	420	0	75	60	53	42	0
2 or more	1	900	720	630	504	607	75	60	53	42	77
2 or more	2 or more	900	720	630	504	0	100	80	70	56	0
1	2 or more	750	600	525	420	0	100	80	70	56	0

[a] Basic minimum hourly volume.

[b] Used for combination of Conditions A and B after adequate trial of other remedial measures.

[c] May be used when the major-street speed exceeds 40 mph or in a community with a population less than 10,000.

[d] May be used for combination of Conditions A and B after adequate trial of other remedial measures when major street exceeds 40 mph or in an isolated community with a population of less than 10,000.

Warrant 2. Four Hour Volumes

☐ Yes ☑ No	Meets each of 4 Highest Hours (Warrant 2 — see Figure 1).

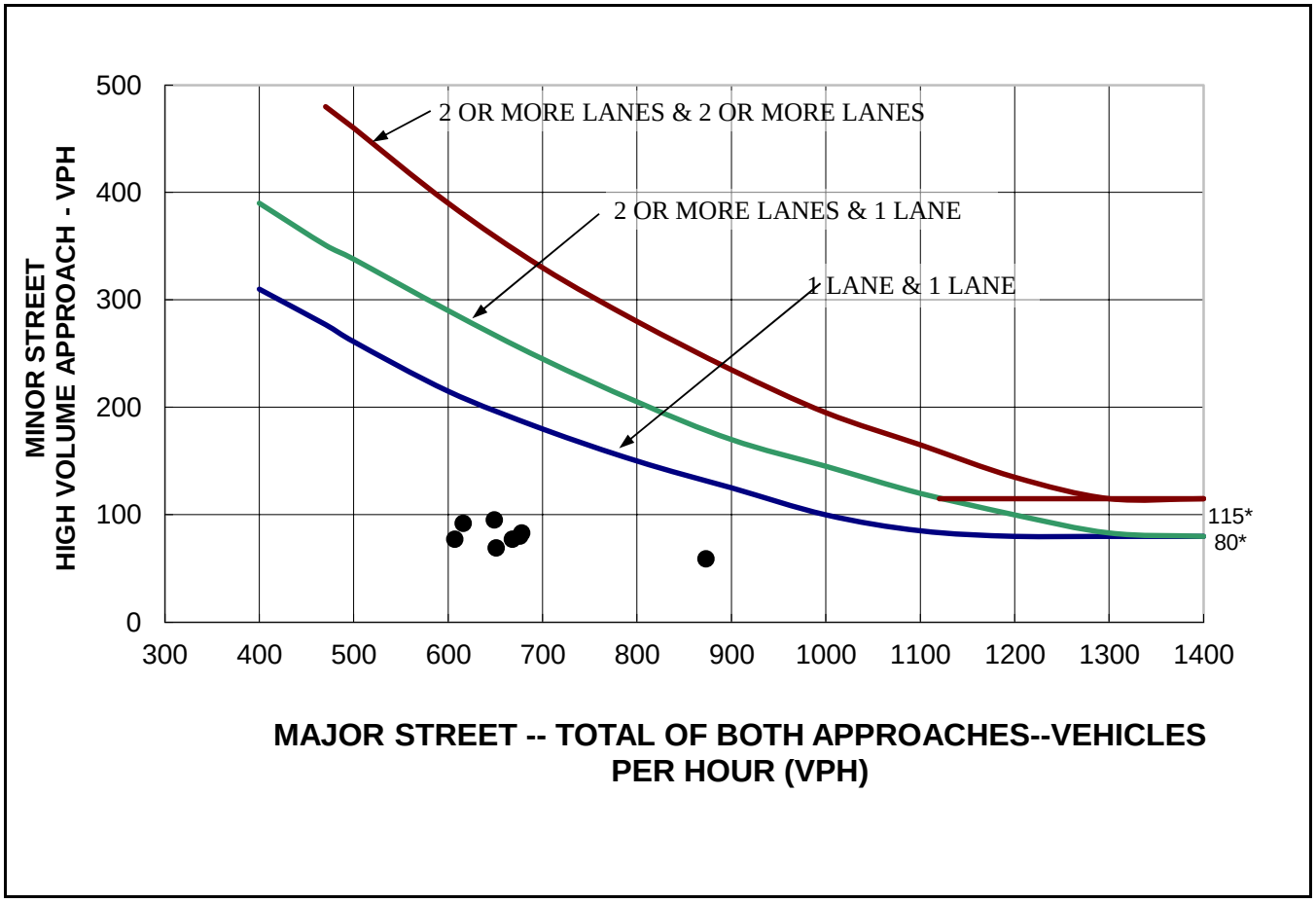
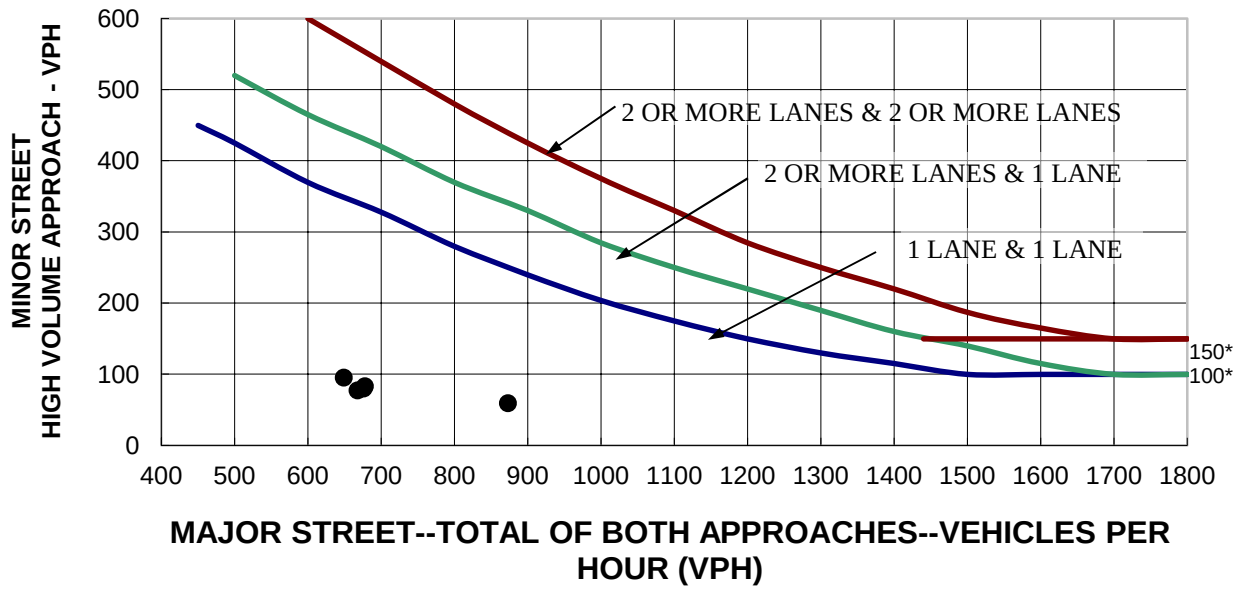


Figure 1. Four-hour volume warrant. (Warrant 2.)

Warrant 3. Peak Hour

☐ Yes ☑ No	Are all of the following conditions true for any four consecutive 15 minute periods? 1. The total stopped time delay experienced by the traffic on one minor street approach (one direction only) controlled by a stop sign equals or exceeds 4 vehicle-hours for a one-lane approach and 5 vehicle-hours for a two-lane approach, *and* 2. The volume of the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes, *and* 3. The total entering volume serviced during the hour equals or exceeds 650 vph for intersections with three approaches or 800 vph for intersections with four (or more) approaches.
	– or –
☐ Yes ☑ No	Meets one High Hour (Warrant 3 — see Figure 2).



***Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.**

Figure 2. Peak hour volume warrant. (Warrant 3.)

Warrant 4. Four Hour Pedestrian Volume

☐ Yes ☒ No Meets each of 4 Highest Hours (Warrant 4 - see Figure 5 and Figure 6.)

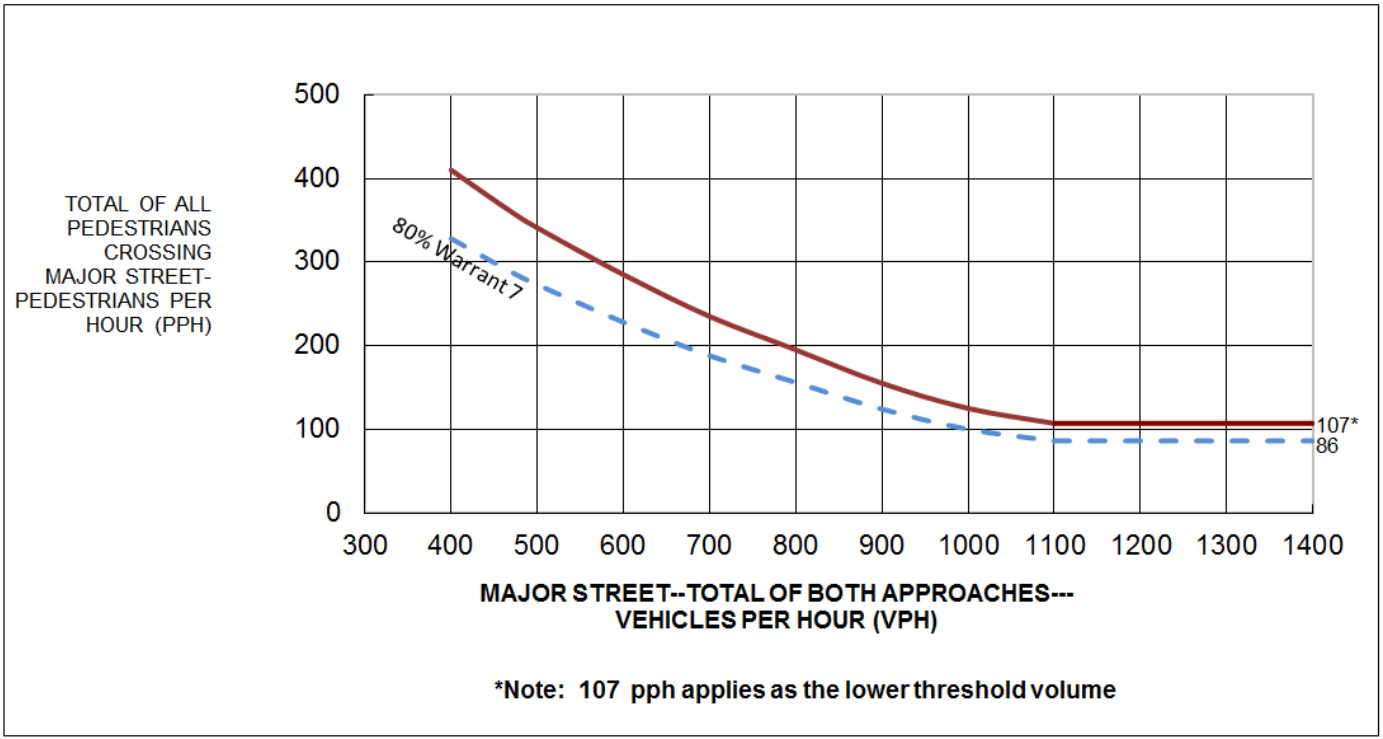


Figure 5. Four hour pedestrian warrant. (Warrant 4.)

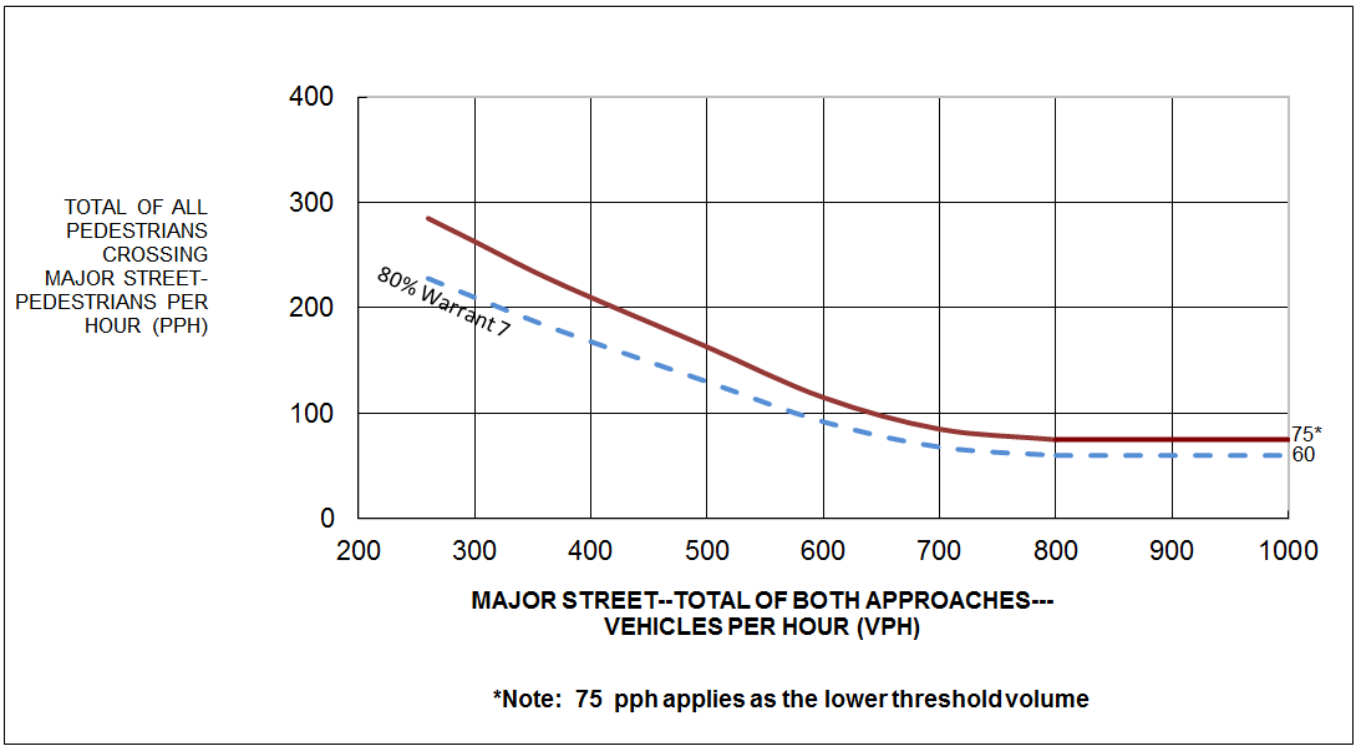


Figure 6. Four hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 35 MPH on major street). (Warrant 4.)

Warrant 4. Peak Hour Pedestrian Volumes

☐ Yes ☒ No Meets Peak Hour Pedestrian (Warrant 4 - see Figure 7 and Figure 8.)

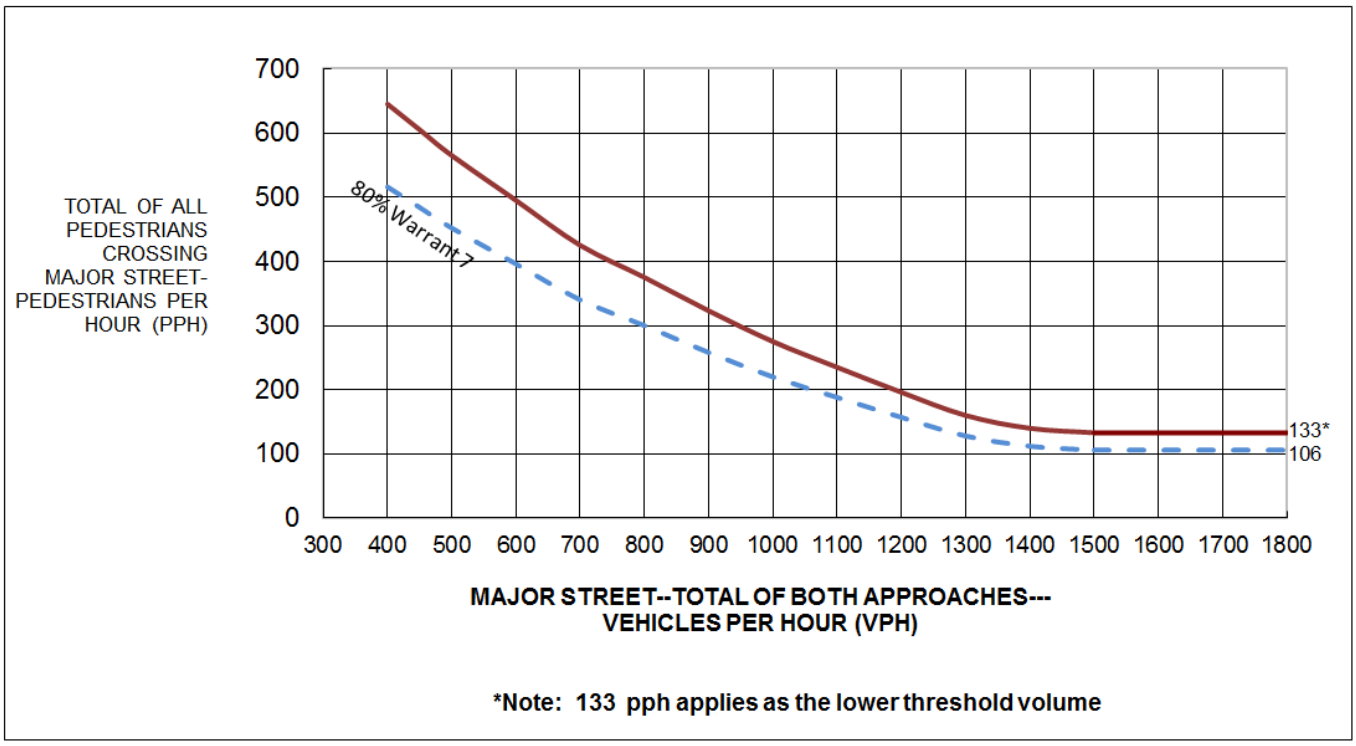


Figure 7. Four hour pedestrian warrant (Warrant 4.)

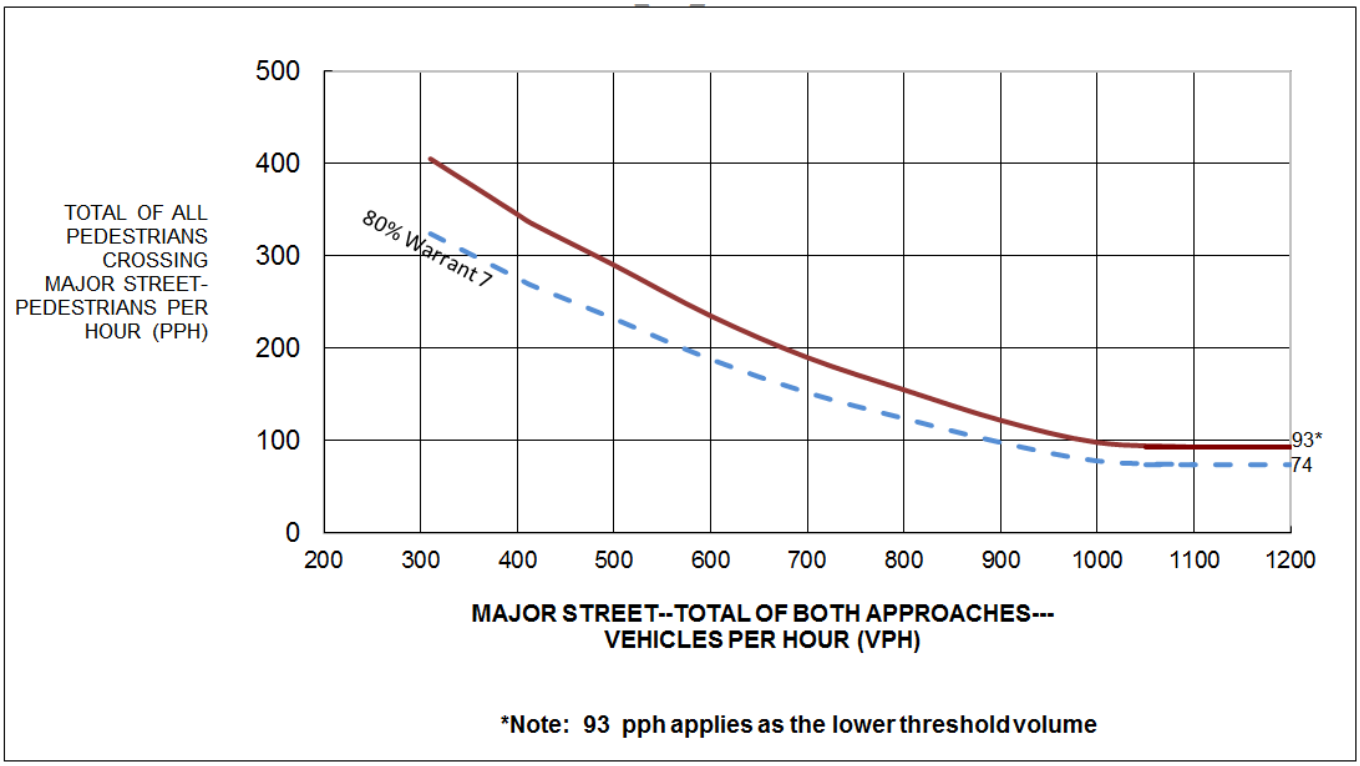


Figure 8. Peak hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 40 MPH on major street). (Warrant 4.)

Warrant 5. School Crossing

☐ Yes ☐ No	Is the number of adequate gaps in traffic stream during the period when the children are using the crossing less than the number of minutes in the same period?
NA	- ***and*** -
☐ Yes ☐ No	Are there a minimum of 20 students during the highest crossing hour?
	- ***and*** -
☐ Yes ☐ No	Is the nearest signal on the major street located more than 300 feet away? (This warrant may be applied if the proposed signal is less than 300 feet and does not restrict the progressive movement of traffic.)

Warrant 6. Coordinated Signal System

☐ Yes ☐ No	On a one-way street or a street with traffic predominantly in one direction, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur?
NA	- ***or*** -
☐ Yes ☐ No	On a two-way street, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur and would the proposed and adjacent traffic control signal provide a progressive operation?

Warrant 7. Crash Experience

☐ Yes ☒ No	Is one of the following conditions met?: ◆ 80% of Condition A or Condition B in Warrant 1 ◆ 56% of Conditions A or B in Warrant 1 (major-street speed exceeding 40 mph or population less than 10,000) ◆ 80% or more of Warrant 4
	- ***and*** -
☐ Yes ☒ No	Have there been 5 or more reported crashes susceptible to correction by a traffic signal in 12 months?

Warrant 8. Roadway Network

NA

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume on all approaches greater than 1000 vehicles for each of any 5 hours of a Saturday and/or Sunday.

- ***or*** -

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume greater than 1000 vehicles for the peak hour of a typical weekday, and do the 5 year projected traffic volumes meet one or more of Warrants 1, 2, and 3 during an average weekday?

Check applicable characteristics of each route (only 1 needs to be checked):

Major Street	Minor Street	
☐ Yes	☐ No	It is part of street or highway system that serves as the principal roadway network for through traffic flow.
☐ Yes	☐ No	It includes rural or suburban highways outside, entering, or traversing a city.
☐ Yes	☐ No	It appears as a major route on an official plan such as a major street plan in an urban area traffic and transportation study.
☐ Yes	☐ No	It connects areas of principal traffic generation.
☐ Yes	☐ No	It has surface street freeway or expressway ramp terminals.

Warrant 9. Intersection Near a Grade Crossing (One Approach Lane at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 9.)

NA

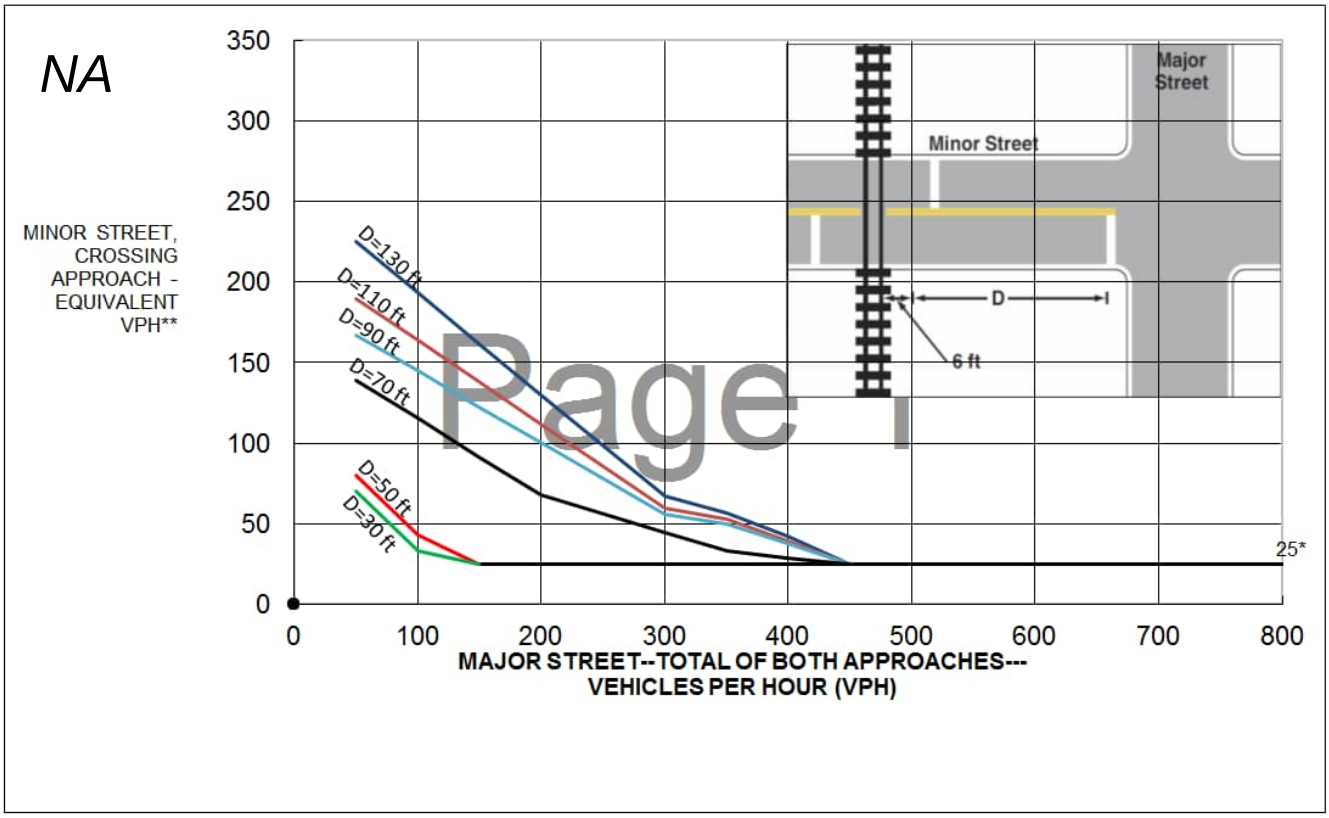


Figure 9. Railroad Grade Crossing (One Approach Lane at the Track Crossing) (Warrant 9.)

Warrant 9. Intersection Near a Grade Crossing (Two or More Approach Lanes at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 10.)

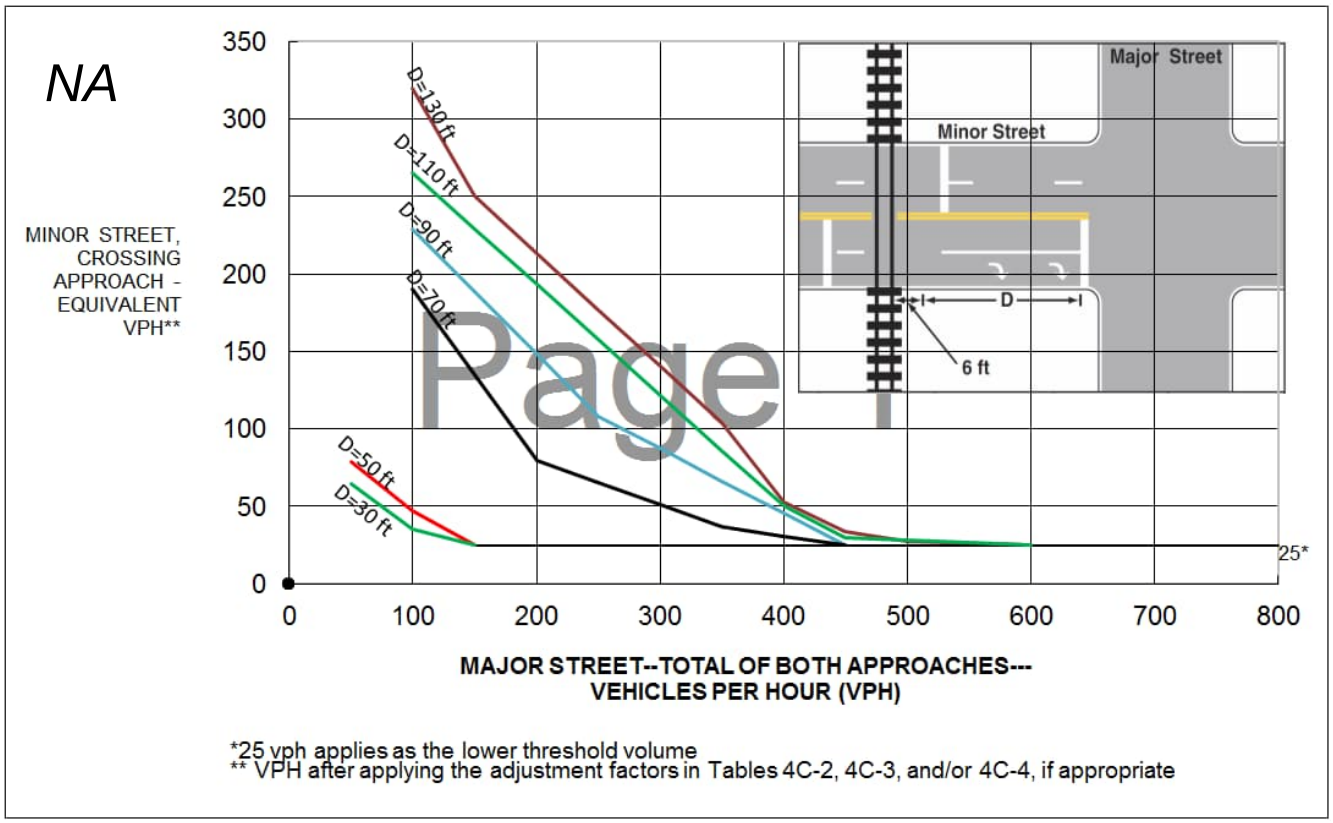


Figure 10. Railroad Grade Crossing (Two or More Approach Lanes at the Track Crossing) (Warrant 9.)

Table 4C-2. Warrant 9, Adjustment Factor for Daily Frequency of Rail Traffic

Rail Traffic per Day	Adjustment Factor
1	0.67
2	0.91
3 to 5	1.00
6 to 8	1.18
9 to 11	1.25
12 or more	1.33

Table 4C-3. Warrant 9, Adjustment Factor for Percentage of High-Occupancy Buses

% of High-Occupancy Buses* on Minor-Street Approach	Adjustment Factor
0%	1.00
2%	1.09
4%	1.19
6% or more	1.32

* A high-occupancy bus is defined as a bus occupied by at least 20 people.

Table 4C-4. Warrant 9, Adjustment Factor for Percentage of Tractor-Trailer Trucks

% of Tractor-Trailer Trucks on Minor-Street Approach	Adjustment Factor	
	D less than 70 feet	D of 70 feet or more
0% to 2.5%	0.50	0.50
2.6% to 7.5%	0.75	0.75
7.6% to 12.5%	1.00	1.00
12.6% to 17.5%	2.30	1.15
17.6% to 22.5%	2.70	1.35
22.6% to 27.5%	3.28	1.64
More than 27.5%	4.18	2.09

Remarks:

Traffic Survey - Count Analysis

2011 TMUTCD Warrants

County: Bexar District: San Angelo

City: San Antonio Population: 200,000 Survey Date: 7/18/2029

	Route #	Name	Control	Section	85% Speed
Major	0	Buena Vista St			35 MPH
Minor	0	Rosillo St			30 MPH

Eight Highest Hours: Include the same 8 hours for the Major and Minor St. volumes.

Time Ends	Major St. - Both App.		Minor St. - Hi. Vol. App.	
	Veh. Total	Ped. Total	Veh. Total	Ped. Total
8:00 AM	995	3	67	
4:00 PM	773	0	95	
1;00 PM	771	0	91	
2:00 PM	762	0	88	
5:00 PM	740	9	108	
9:00 AM	742	6	79	
6:00 PM	702	6	105	
3:00 PM	692	0	88	

Comments:

Analysis period- 2029

Recommendation- A Traffic signal is recommended at this intersection.

Warrant 1. Eight Hour Vehicular Volume

☐ Yes ☒ No Meets 70%[c] (major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition A.

- or -

☐ Yes ☒ No Meets 70%[c] (major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition B.

- or -

☐ Yes ☒ No Meets 80%[b] of Conditions A and B.

- or -

☐ Yes ☒ No Meets 56%[d] of Conditions A and B (major-street speed exceeds 40 mph or population less than 10,000).

Condition A - Minimum Vehicle Volume

Number of Lanes		Vehicles per hour on Major St. (Total of both Approaches)					Vehicles per hour on higher-volume Minor St. approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	115.3%	100%[a]	80%[b]	70%[c]	56%[d]	58.5%
1	1	500	400	350	280	0	150	120	105	84	0
2 or more	1	600	480	420	336	691.98	150	120	105	84	87.78
2 or more	2 or more	600	480	420	336	0	200	160	140	112	0
1	2 or more	500	400	350	280	0	200	160	140	112	0

Condition B - Interruption of Continuous Traffic

Number of Lanes		Vehicles per hour on Major St. (Total of both Approaches)					Vehicles per hour on higher-volume Minor St. approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	76.9%	100%[a]	80%[b]	70%[c]	56%[d]	117.0%
1	1	750	600	525	420	0	75	60	53	42	0
2 or more	1	900	720	630	504	691.98	75	60	53	42	87.78
2 or more	2 or more	900	720	630	504	0	100	80	70	56	0
1	2 or more	750	600	525	420	0	100	80	70	56	0

[a] Basic minimum hourly volume.

[b] Used for combination of Conditions A and B after adequate trial of other remedial measures.

[c] May be used when the major-street speed exceeds 40 mph or in a community with a population less than 10,000.

[d] May be used for combination of Conditions A and B after adequate trial of other remedial measures when major street exceeds 40 mph or in an isolated community with a population of less than 10,000.

Warrant 2. Four Hour Volumes

☐ Yes ☑ No	Meets each of 4 Highest Hours (Warrant 2 — see Figure 1).

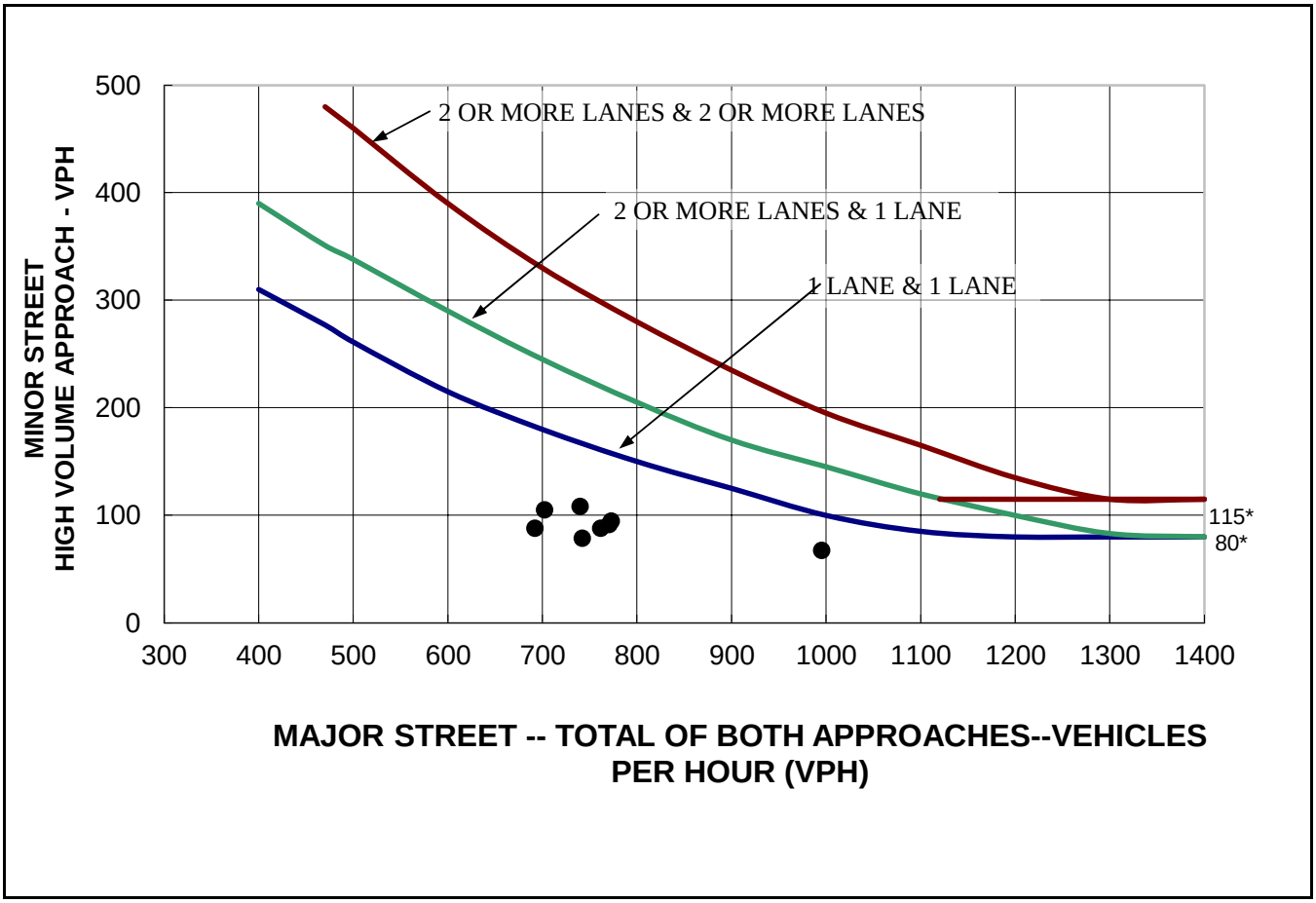
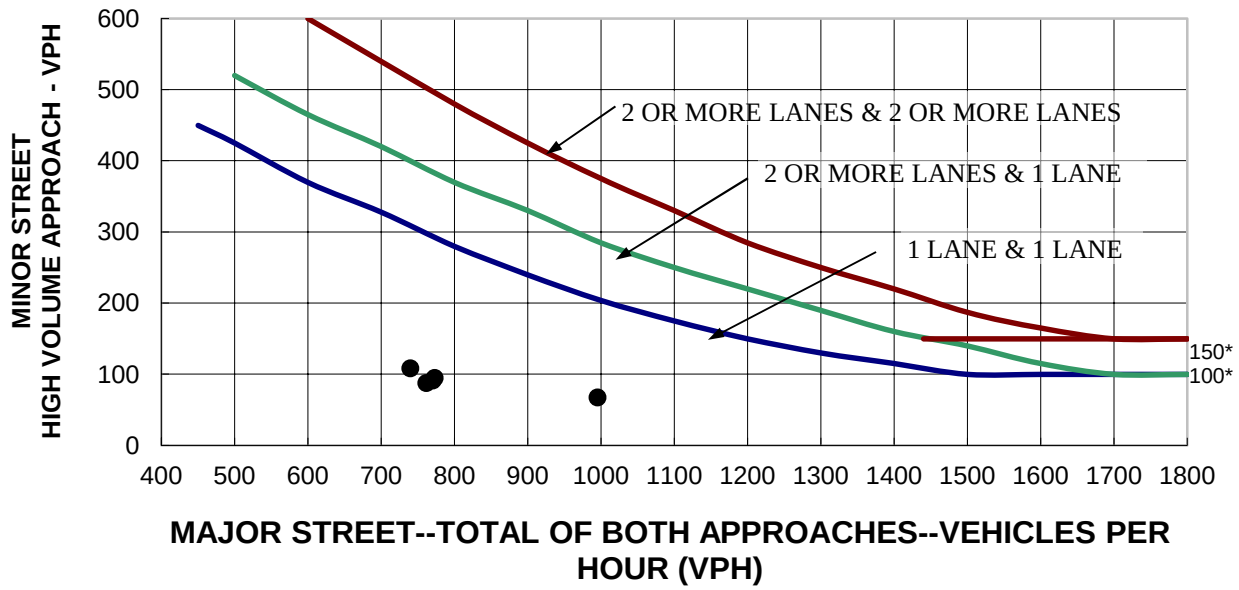


Figure 1. Four-hour volume warrant. (Warrant 2.)

Warrant 3. Peak Hour

☐ Yes ☑ No	Are all of the following conditions true for any four consecutive 15 minute periods? 1. The total stopped time delay experienced by the traffic on one minor street approach (one direction only) controlled by a stop sign equals or exceeds 4 vehicle-hours for a one-lane approach and 5 vehicle-hours for a two-lane approach, *and* 2. The volume of the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes, *and* 3. The total entering volume serviced during the hour equals or exceeds 650 vph for intersections with three approaches or 800 vph for intersections with four (or more) approaches.
	– or –
☐ Yes ☑ No	Meets one High Hour (Warrant 3 — see Figure 2).



***Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.**

Figure 2. Peak hour volume warrant. (Warrant 3.)

Warrant 4. Four Hour Pedestrian Volume

☐ Yes ☒ No Meets each of 4 Highest Hours (Warrant 4 - see Figure 5 and Figure 6.)

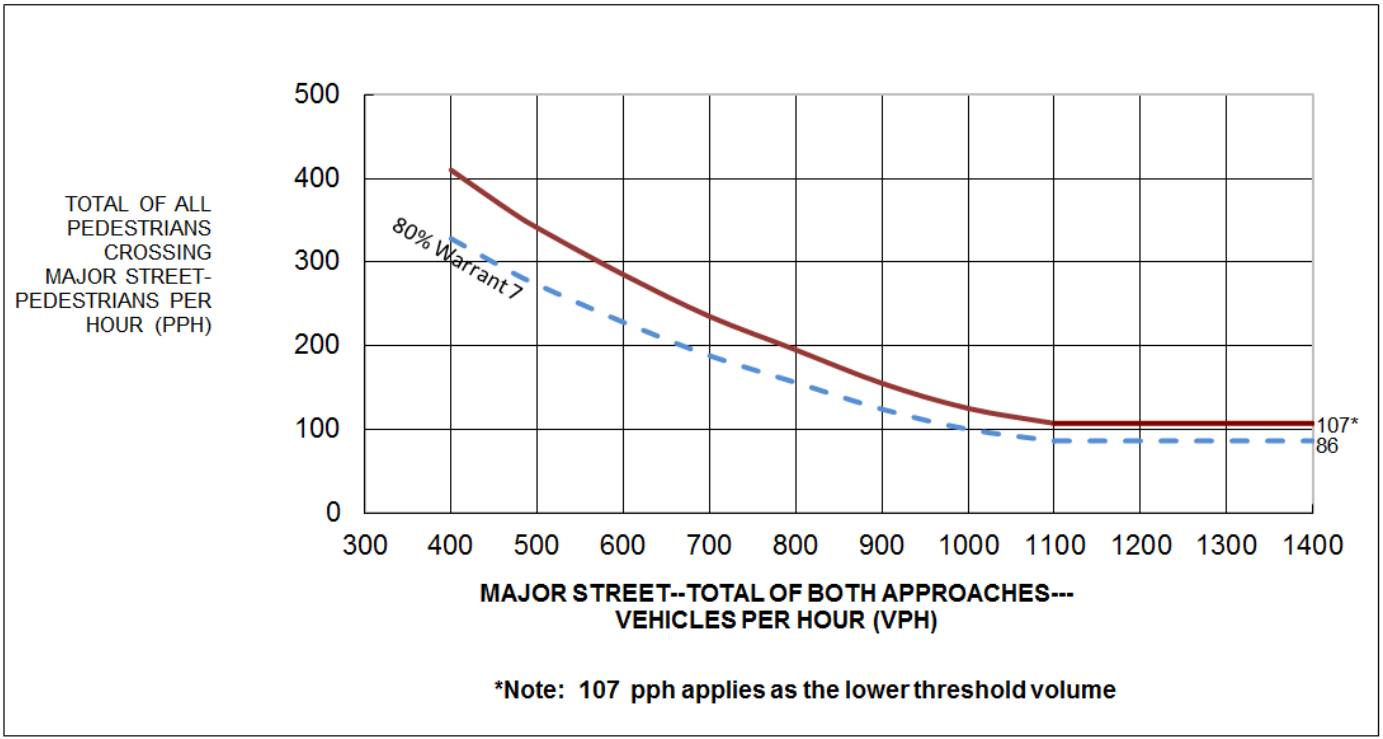


Figure 5. Four hour pedestrian warrant. (Warrant 4.)

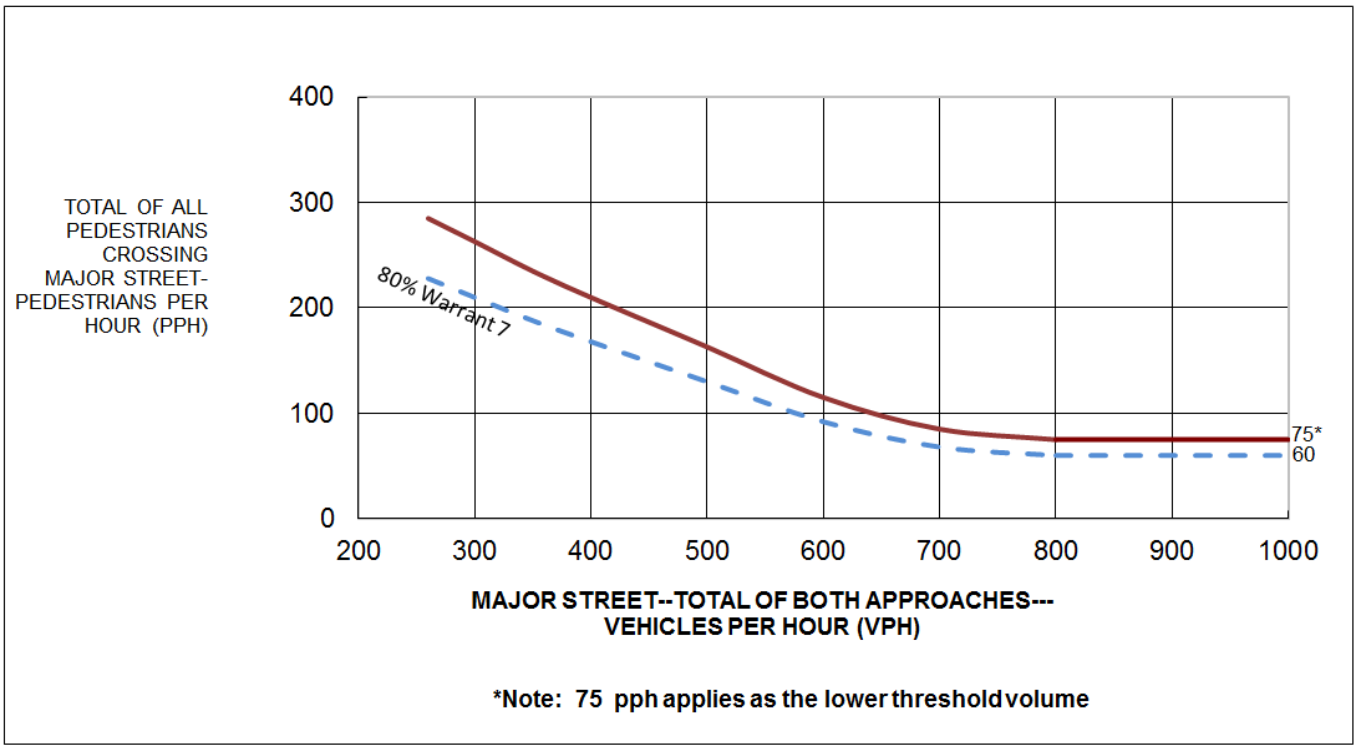


Figure 6. Four hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 35 MPH on major street). (Warrant 4.)

Warrant 4. Peak Hour Pedestrian Volumes

☐ Yes ☒ No Meets Peak Hour Pedestrian (Warrant 4 - see Figure 7 and Figure 8.)

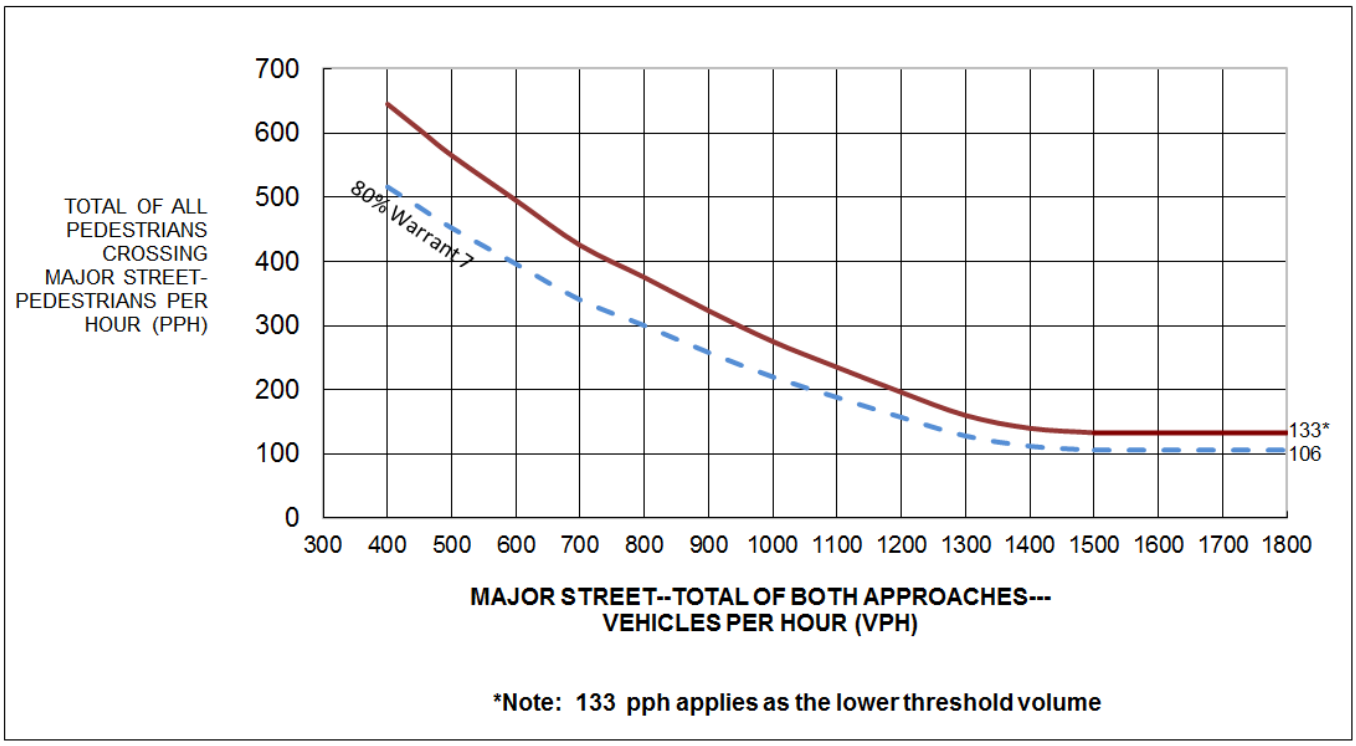


Figure 7. Four hour pedestrian warrant (Warrant 4.)

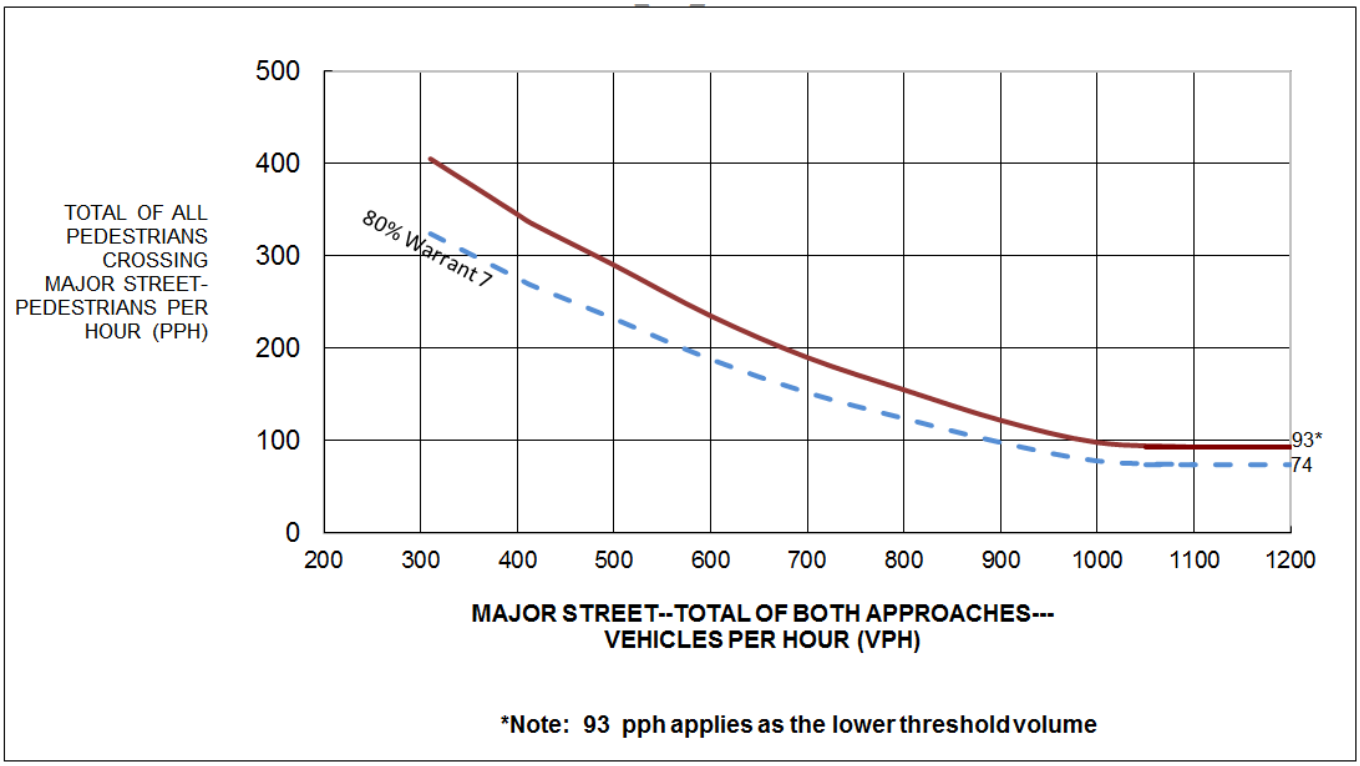


Figure 8. Peak hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 40 MPH on major street). (Warrant 4.)

Warrant 5. School Crossing

☐ Yes ☐ No	Is the number of adequate gaps in traffic stream during the period when the children are using the crossing less than the number of minutes in the same period?
NA	- ***and*** -
☐ Yes ☐ No	Are there a minimum of 20 students during the highest crossing hour?
	- ***and*** -
☐ Yes ☐ No	Is the nearest signal on the major street located more than 300 feet away? (This warrant may be applied if the proposed signal is less than 300 feet and does not restrict the progressive movement of traffic.)

Warrant 6. Coordinated Signal System

☐ Yes ☐ No	On a one-way street or a street with traffic predominantly in one direction, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur?
NA	- ***or*** -
☐ Yes ☐ No	On a two-way street, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur and would the proposed and adjacent traffic control signal provide a progressive operation?

Warrant 7. Crash Experience

☐ Yes ☒ No	Is one of the following conditions met?: ◆ 80% of Condition A or Condition B in Warrant 1 ◆ 56% of Conditions A or B in Warrant 1 (major-street speed exceeding 40 mph or population less than 10,000) ◆ 80% or more of Warrant 4
	- ***and*** -
☐ Yes ☒ No	Have there been 5 or more reported crashes susceptible to correction by a traffic signal in 12 months?

Warrant 8. Roadway Network

NA

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume on all approaches greater than 1000 vehicles for each of any 5 hours of a Saturday and/or Sunday.

- ***or*** -

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume greater than 1000 vehicles for the peak hour of a typical weekday, and do the 5 year projected traffic volumes meet one or more of Warrants 1, 2, and 3 during an average weekday?

Check applicable characteristics of each route (only 1 needs to be checked):

Major Street	Minor Street	
☐ Yes	☐ No	It is part of street or highway system that serves as the principal roadway network for through traffic flow.
☐ Yes	☐ No	It includes rural or suburban highways outside, entering, or traversing a city.
☐ Yes	☐ No	It appears as a major route on an official plan such as a major street plan in an urban area traffic and transportation study.
☐ Yes	☐ No	It connects areas of principal traffic generation.
☐ Yes	☐ No	It has surface street freeway or expressway ramp terminals.

Warrant 9. Intersection Near a Grade Crossing (One Approach Lane at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 9.)

NA

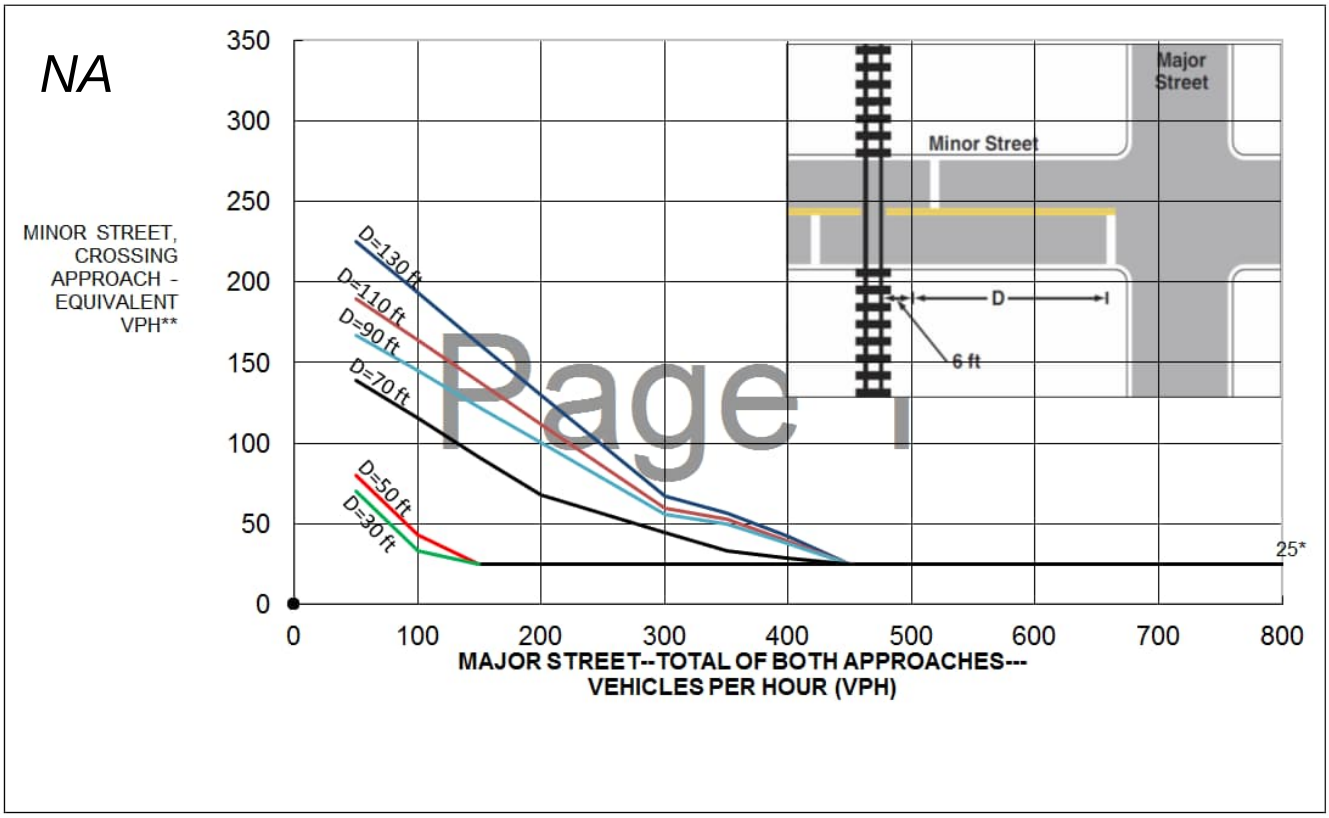


Figure 9. Railroad Grade Crossing (One Approach Lane at the Track Crossing) (Warrant 9.)

Warrant 9. Intersection Near a Grade Crossing (Two or More Approach Lanes at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 10.)

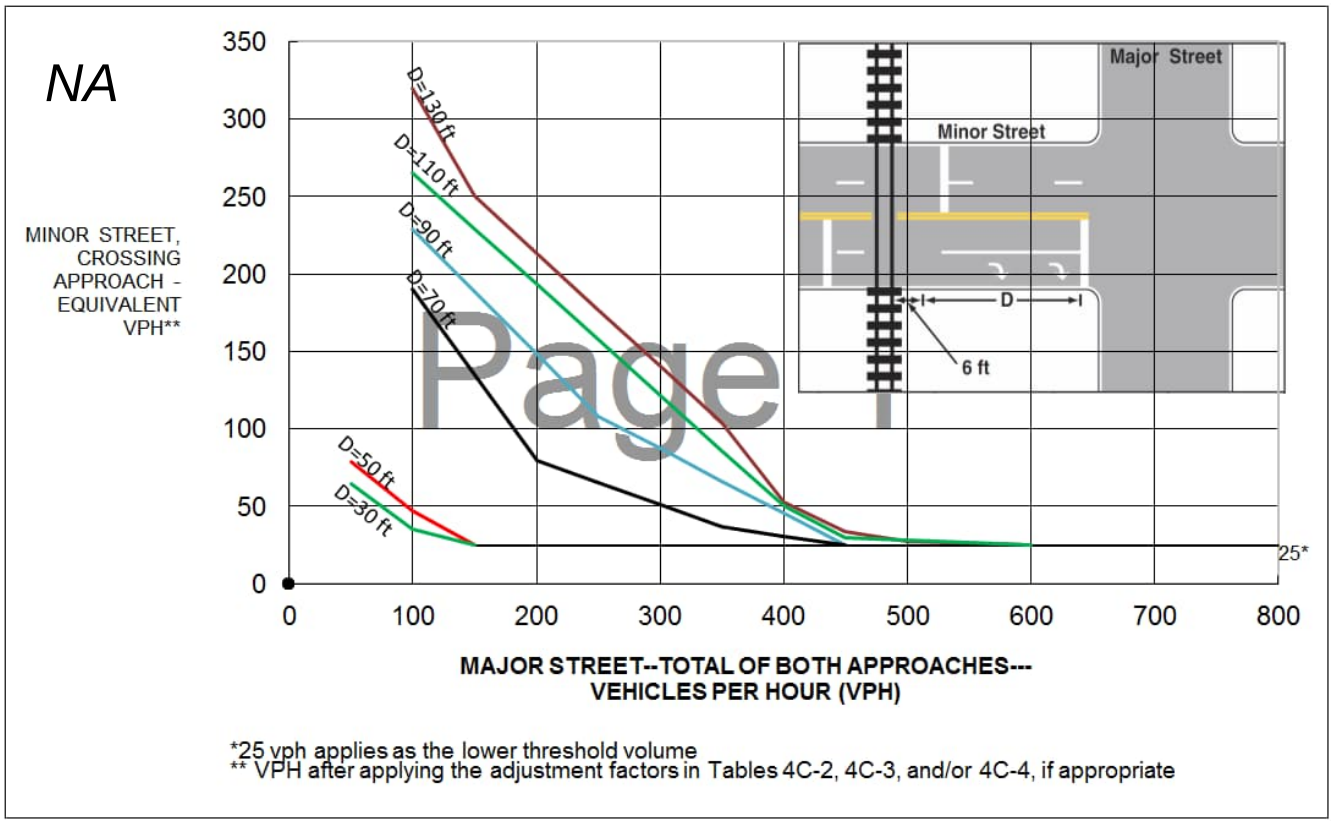


Figure 10. Railroad Grade Crossing (Two or More Approach Lanes at the Track Crossing) (Warrant 9.)

Table 4C-2. Warrant 9, Adjustment Factor for Daily Frequency of Rail Traffic

Rail Traffic per Day	Adjustment Factor
1	0.67
2	0.91
3 to 5	1.00
6 to 8	1.18
9 to 11	1.25
12 or more	1.33

Table 4C-3. Warrant 9, Adjustment Factor for Percentage of High-Occupancy Buses

% of High-Occupancy Buses* on Minor-Street Approach	Adjustment Factor
0%	1.00
2%	1.09
4%	1.19
6% or more	1.32

* A high-occupancy bus is defined as a bus occupied by at least 20 people.

Table 4C-4. Warrant 9, Adjustment Factor for Percentage of Tractor-Trailer Trucks

% of Tractor-Trailer Trucks on Minor-Street Approach	Adjustment Factor	
	D less than 70 feet	D of 70 feet or more
0% to 2.5%	0.50	0.50
2.6% to 7.5%	0.75	0.75
7.6% to 12.5%	1.00	1.00
12.6% to 17.5%	2.30	1.15
17.6% to 22.5%	2.70	1.35
22.6% to 27.5%	3.28	1.64
More than 27.5%	4.18	2.09

Remarks:

Traffic Survey - Count Analysis

2011 TMUTCD Warrants

County: Bexar District: San Angelo

City: San Antonio Population: 200,000 Survey Date: 7/18/2019

	Route #	Name	Control	Section	85% Speed
Major	0	Commerce St			35 MPH
Minor	0	Rosillo St			30 MPH

Eight Highest Hours: Include the same 8 hours for the Major and Minor St. volumes.

Time Ends	Major St. - Both App.		Minor St. - Hi. Vol. App.	
	Veh. Total	Ped. Total	Veh. Total	Ped. Total
6:00 PM	1,490	14	245	
5:00 PM	1,364	21	252	
4;00 PM	1,184	0	221	
1:00 PM	1,069	0	214	
3:00 PM	1,047	0	206	
7:00 PM	1,000	0	209	
2:00 PM	997	0	204	
12 NOON	909	0	197	

Comments:

Analysis period- 2019

Recommendation- A Traffic signal is warranted at this intersection.

Warrant 1. Eight Hour Vehicular Volume

☒ Yes ☐ No Meets 70%[c] (major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition A.

- or -

☒ Yes ☐ No Meets 70%[c] (major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition B.

- or -

☒ Yes ☐ No Meets 80%[b] of Conditions A and B.

- or -

☐ Yes ☒ No Meets 56%[d] of Conditions A and B (major-street speed exceeds 40 mph or population less than 10,000).

Condition A - Minimum Vehicle Volume

Number of Lanes		Vehicles per hour on Major St. (Total of both Approaches)					Vehicles per hour on higher-volume Minor St. approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	151.5%	100%[a]	80%[b]	70%[c]	56%[d]	131.3%
1	1	500	400	350	280	0	150	120	105	84	0
2 or more	1	600	480	420	336	909	150	120	105	84	197
2 or more	2 or more	600	480	420	336	0	200	160	140	112	0
1	2 or more	500	400	350	280	0	200	160	140	112	0

Condition B - Interruption of Continuous Traffic

Number of Lanes		Vehicles per hour on Major St. (Total of both Approaches)					Vehicles per hour on higher-volume Minor St. approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	101.0%	100%[a]	80%[b]	70%[c]	56%[d]	262.7%
1	1	750	600	525	420	0	75	60	53	42	0
2 or more	1	900	720	630	504	909	75	60	53	42	197
2 or more	2 or more	900	720	630	504	0	100	80	70	56	0
1	2 or more	750	600	525	420	0	100	80	70	56	0

[a] Basic minimum hourly volume.

[b] Used for combination of Conditions A and B after adequate trial of other remedial measures.

[c] May be used when the major-street speed exceeds 40 mph or in a community with a population less than 10,000.

[d] May be used for combination of Conditions A and B after adequate trial of other remedial measures when major street exceeds 40 mph or in an isolated community with a population of less than 10,000.

Warrant 2. Four Hour Volumes

☑ Yes ☐ No	Meets each of 4 Highest Hours (Warrant 2 — see Figure 1).

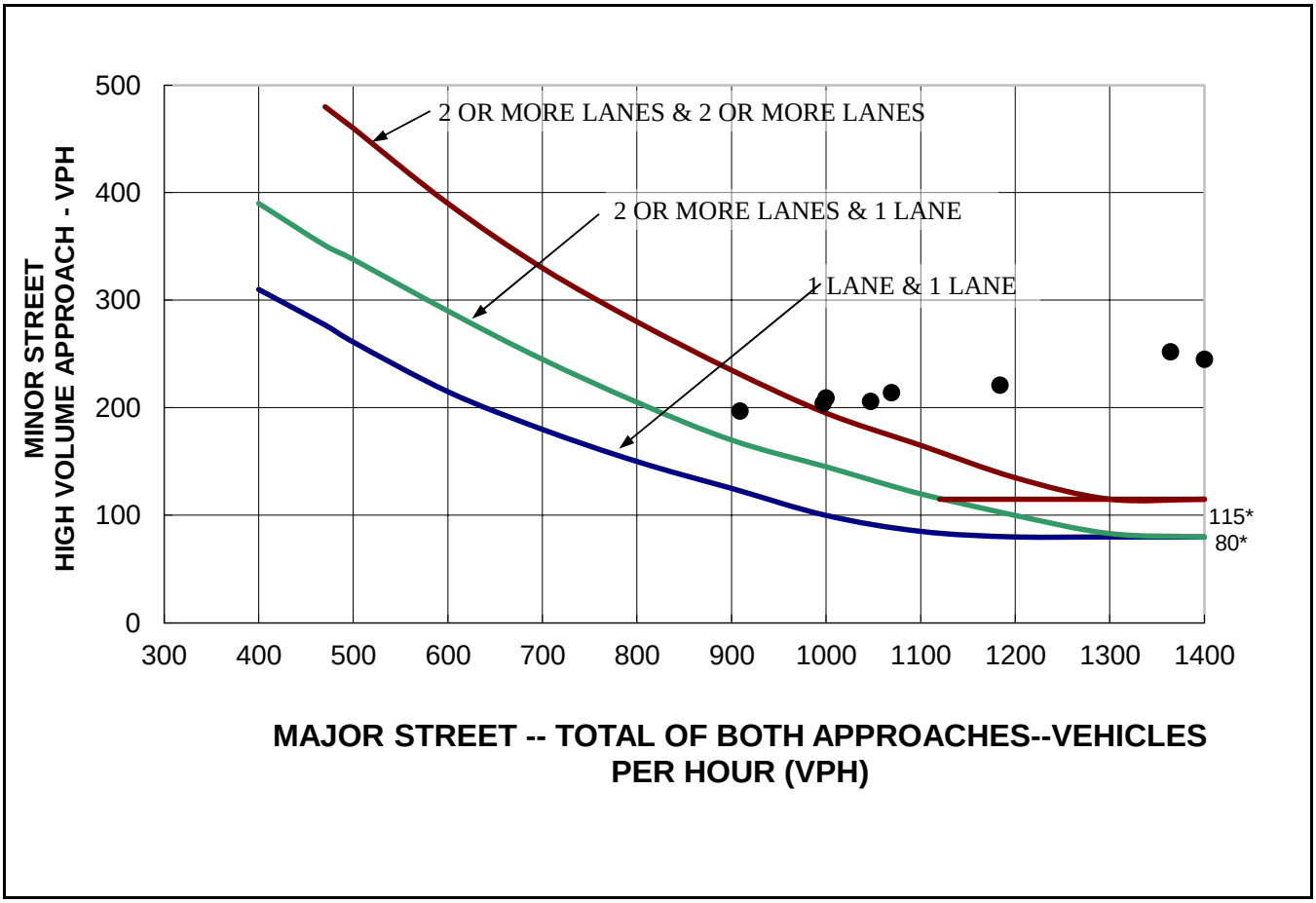
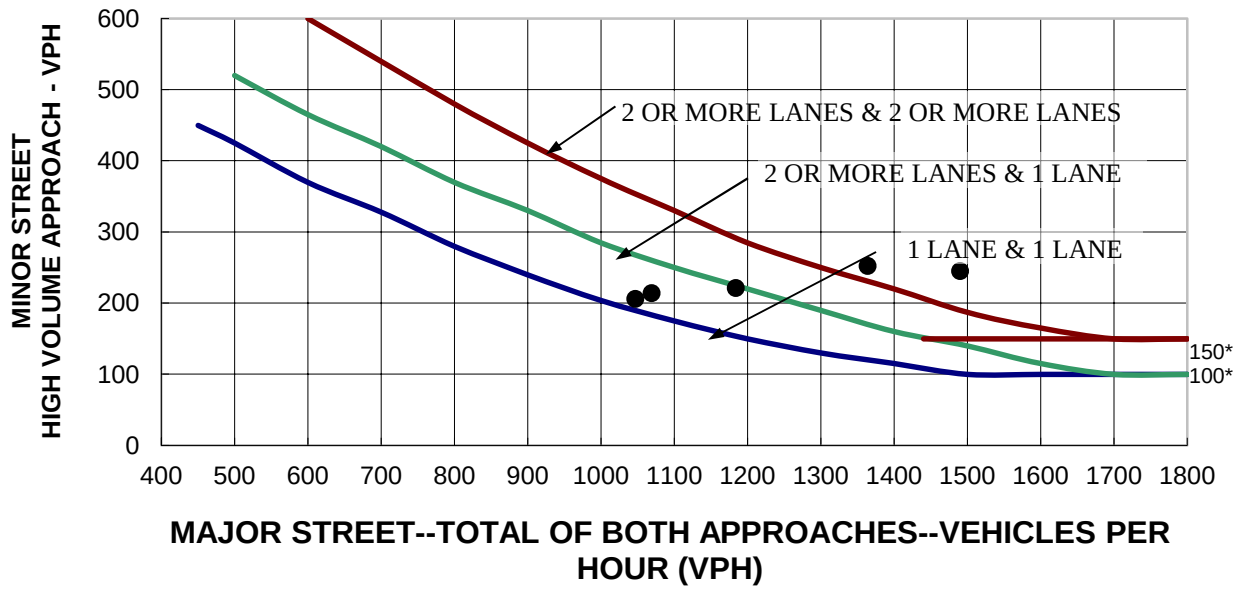


Figure 1. Four-hour volume warrant. (Warrant 2.)

Warrant 3. Peak Hour

☐ Yes ☑ No	Are all of the following conditions true for any four consecutive 15 minute periods? 1. The total stopped time delay experienced by the traffic on one minor street approach (one direction only) controlled by a stop sign equals or exceeds 4 vehicle-hours for a one-lane approach and 5 vehicle-hours for a two-lane approach, *and* 2. The volume of the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes, *and* 3. The total entering volume serviced during the hour equals or exceeds 650 vph for intersections with three approaches or 800 vph for intersections with four (or more) approaches.
	– or –
☑ Yes ☐ No	Meets one High Hour (Warrant 3 — see Figure 2).



***Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.**

Figure 2. Peak hour volume warrant. (Warrant 3.)

Warrant 4. Four Hour Pedestrian Volume

☐ Yes ☒ No Meets each of 4 Highest Hours (Warrant 4 - see Figure 5 and Figure 6.)

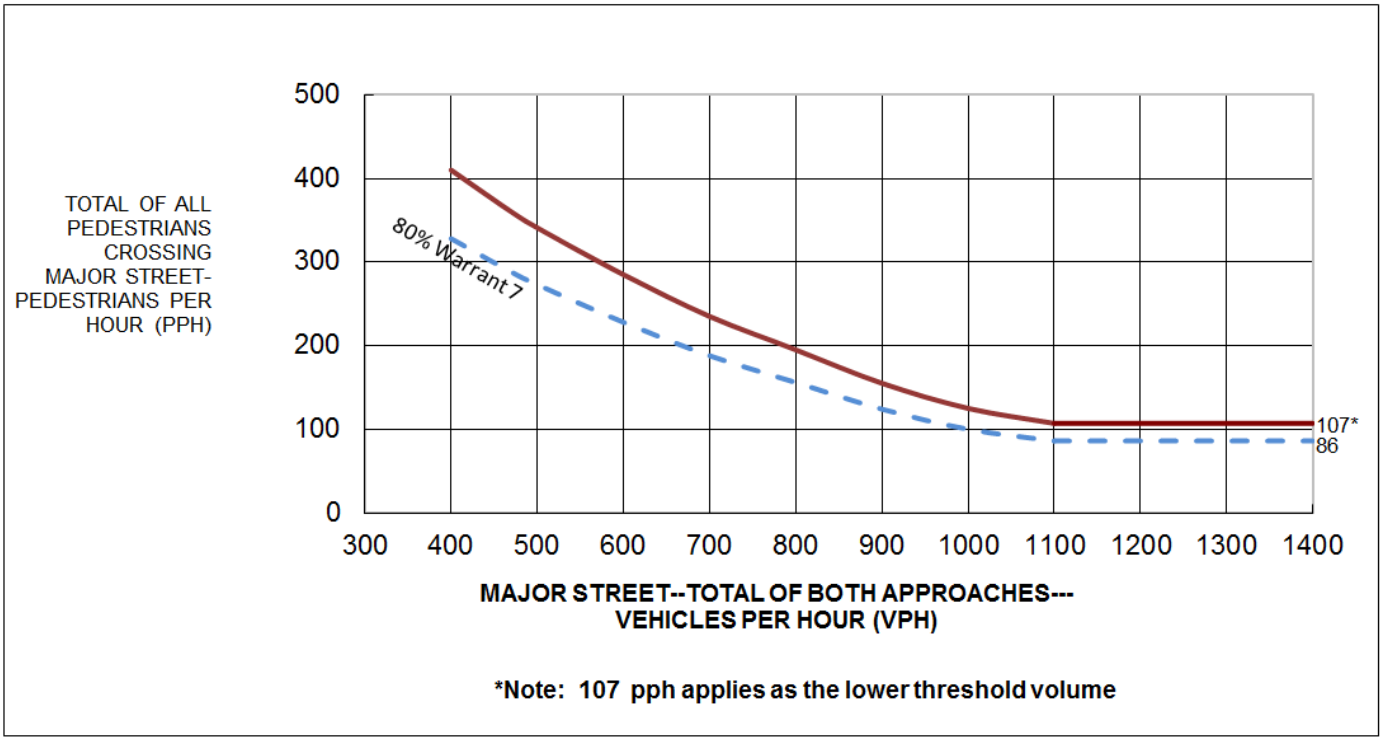


Figure 5. Four hour pedestrian warrant. (Warrant 4.)

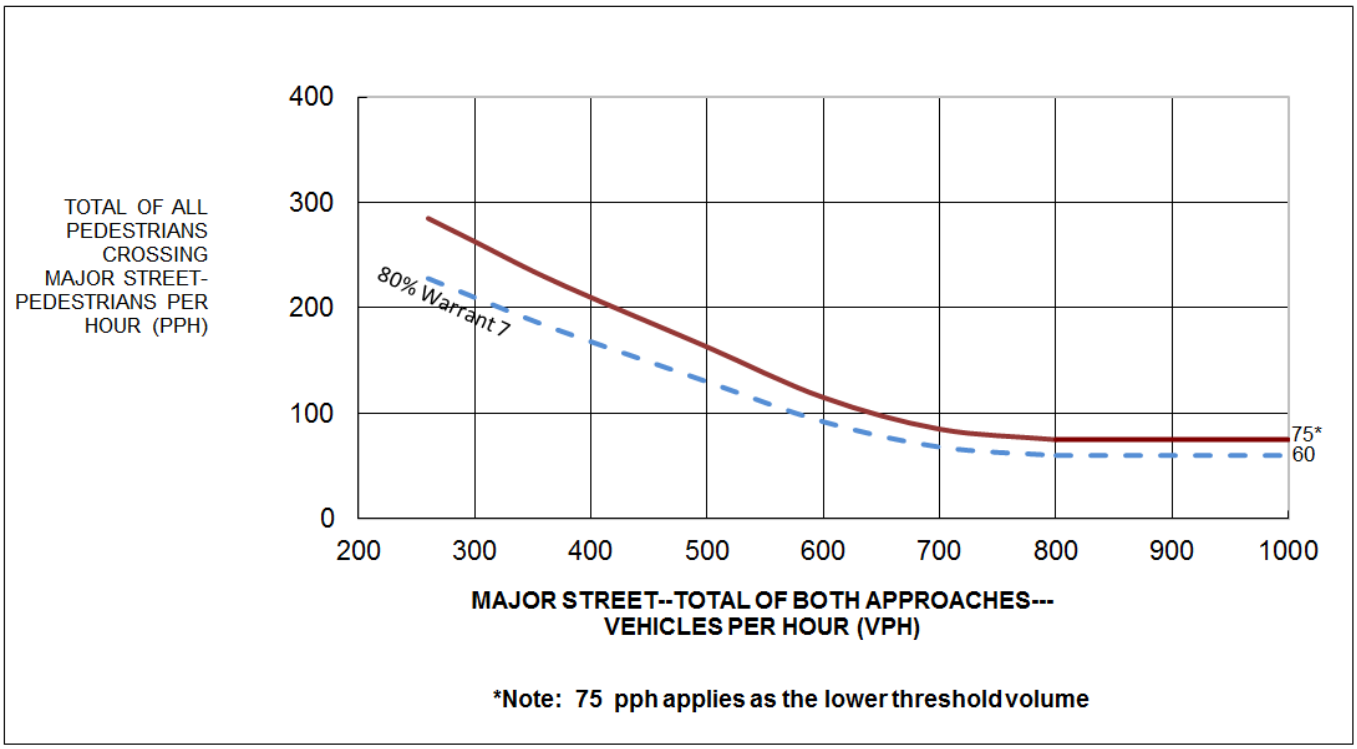


Figure 6. Four hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 35 MPH on major street). (Warrant 4.)

Warrant 4. Peak Hour Pedestrian Volumes

☐ Yes ☒ No Meets Peak Hour Pedestrian (Warrant 4 - see Figure 7 and Figure 8.)

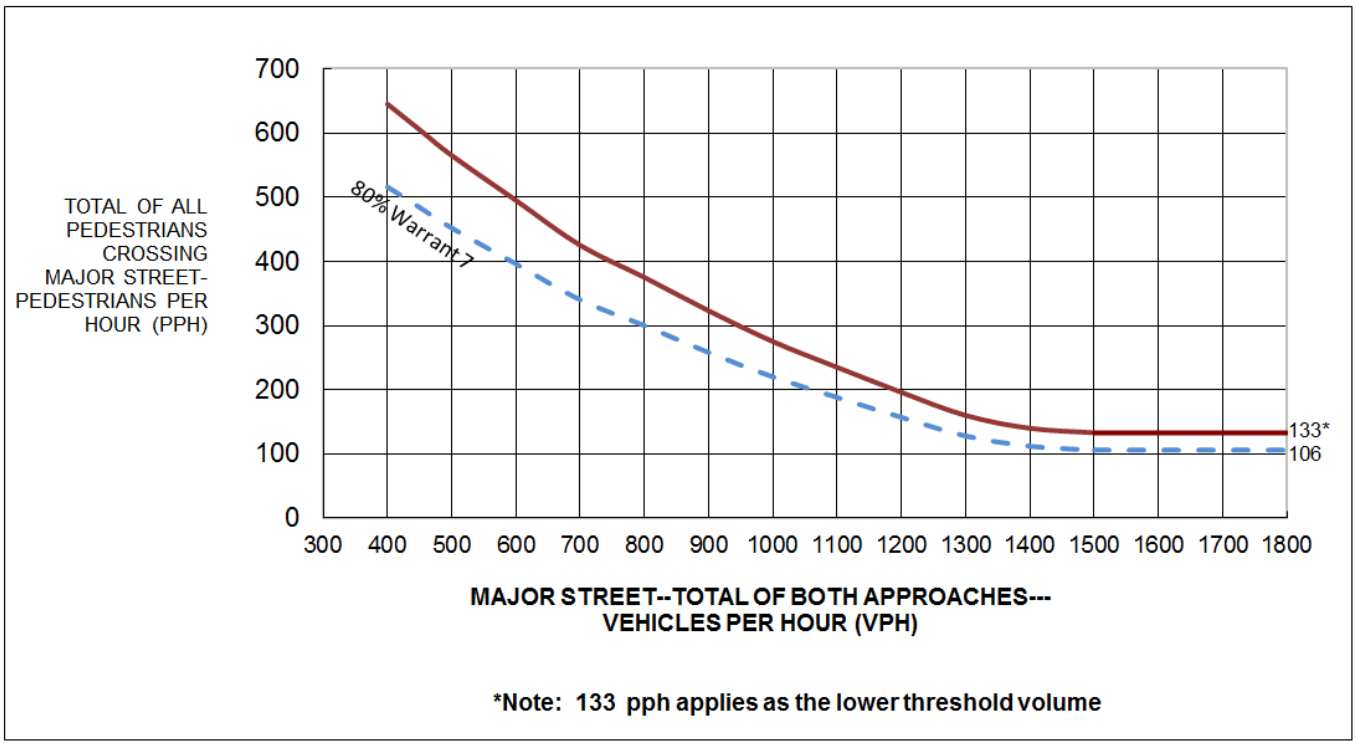


Figure 7. Four hour pedestrian warrant (Warrant 4.)

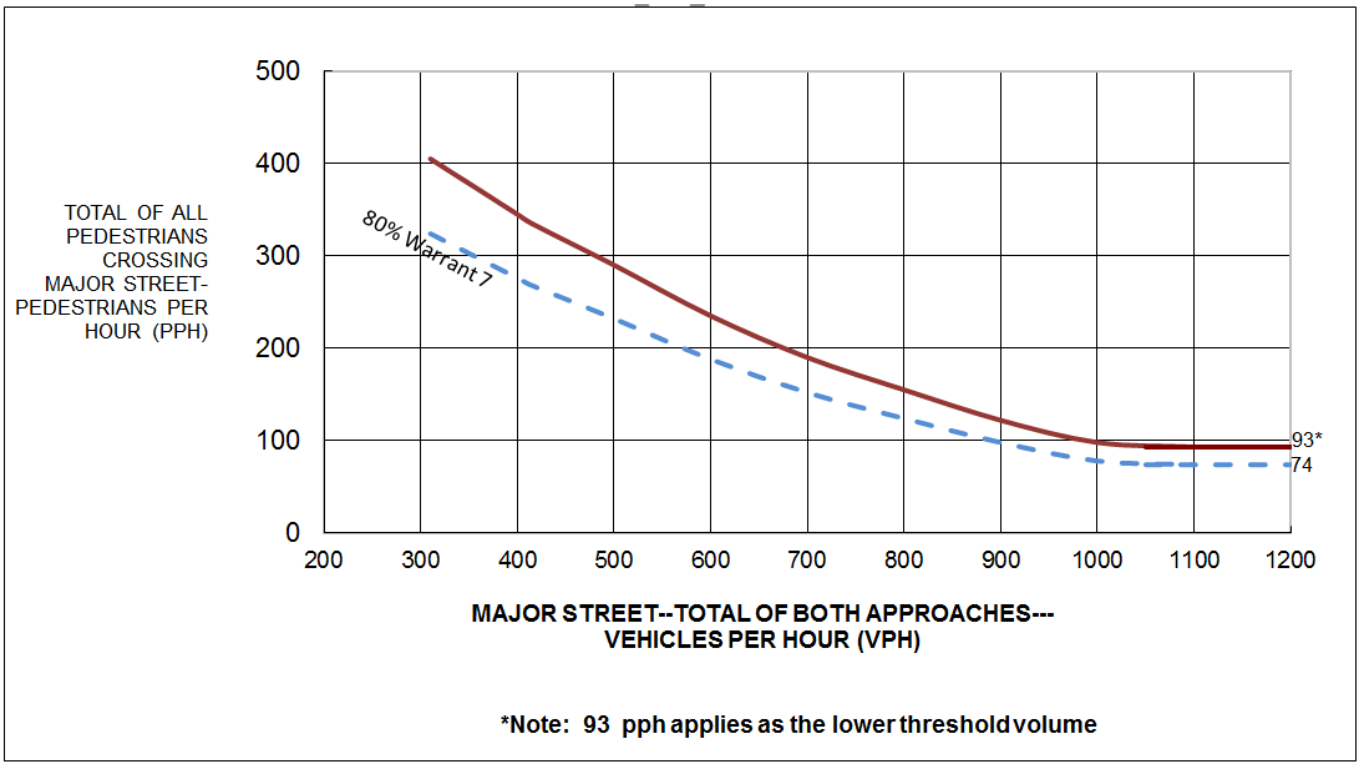


Figure 8. Peak hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 40 MPH on major street). (Warrant 4.)

Warrant 5. School Crossing

☐ Yes ☐ No	Is the number of adequate gaps in traffic stream during the period when the children are using the crossing less than the number of minutes in the same period?
NA	- ***and*** -
☐ Yes ☐ No	Are there a minimum of 20 students during the highest crossing hour?
	- ***and*** -
☐ Yes ☐ No	Is the nearest signal on the major street located more than 300 feet away? (This warrant may be applied if the proposed signal is less than 300 feet and does not restrict the progressive movement of traffic.)

Warrant 6. Coordinated Signal System

☐ Yes ☐ No	On a one-way street or a street with traffic predominantly in one direction, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur?
NA	- ***or*** -
☐ Yes ☐ No	On a two-way street, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur and would the proposed and adjacent traffic control signal provide a progressive operation?

Warrant 7. Crash Experience

☐ Yes ☒ No	Is one of the following conditions met?: ◆ 80% of Condition A or Condition B in Warrant 1 ◆ 56% of Conditions A or B in Warrant 1 (major-street speed exceeding 40 mph or population less than 10,000) ◆ 80% or more of Warrant 4
	- ***and*** -
☐ Yes ☒ No	Have there been 5 or more reported crashes susceptible to correction by a traffic signal in 12 months?

Warrant 8. Roadway Network

NA

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume on all approaches greater than 1000 vehicles for each of any 5 hours of a Saturday and/or Sunday.

- ***or*** -

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume greater than 1000 vehicles for the peak hour of a typical weekday, and do the 5 year projected traffic volumes meet one or more of Warrants 1, 2, and 3 during an average weekday?

Check applicable characteristics of each route (only 1 needs to be checked):

Major Street	Minor Street	
☐ Yes	☐ No	It is part of street or highway system that serves as the principal roadway network for through traffic flow.
☐ Yes	☐ No	It includes rural or suburban highways outside, entering, or traversing a city.
☐ Yes	☐ No	It appears as a major route on an official plan such as a major street plan in an urban area traffic and transportation study.
☐ Yes	☐ No	It connects areas of principal traffic generation.
☐ Yes	☐ No	It has surface street freeway or expressway ramp terminals.

Warrant 9. Intersection Near a Grade Crossing (One Approach Lane at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 9.)

NA

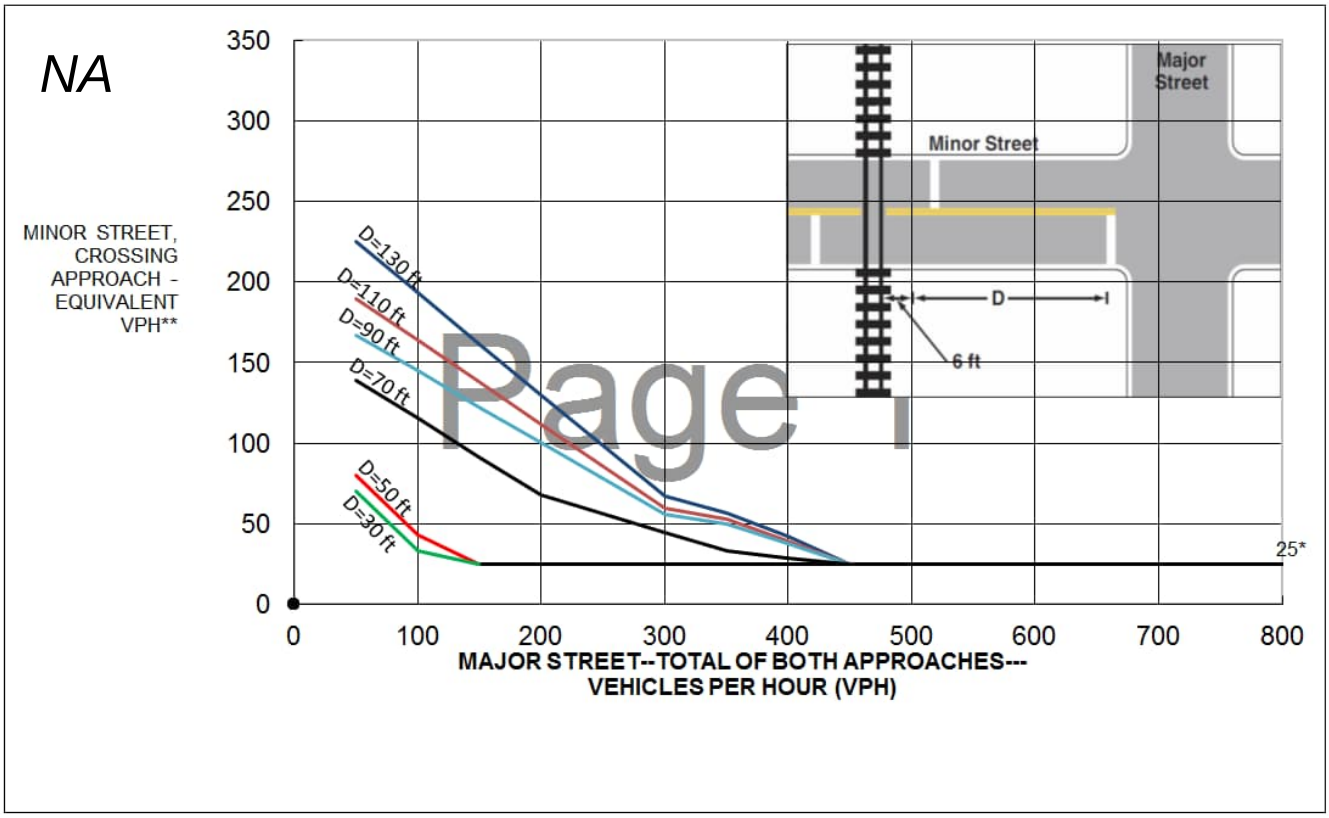


Figure 9. Railroad Grade Crossing (One Approach Lane at the Track Crossing) (Warrant 9.)

Warrant 9. Intersection Near a Grade Crossing (Two or More Approach Lanes at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 10.)

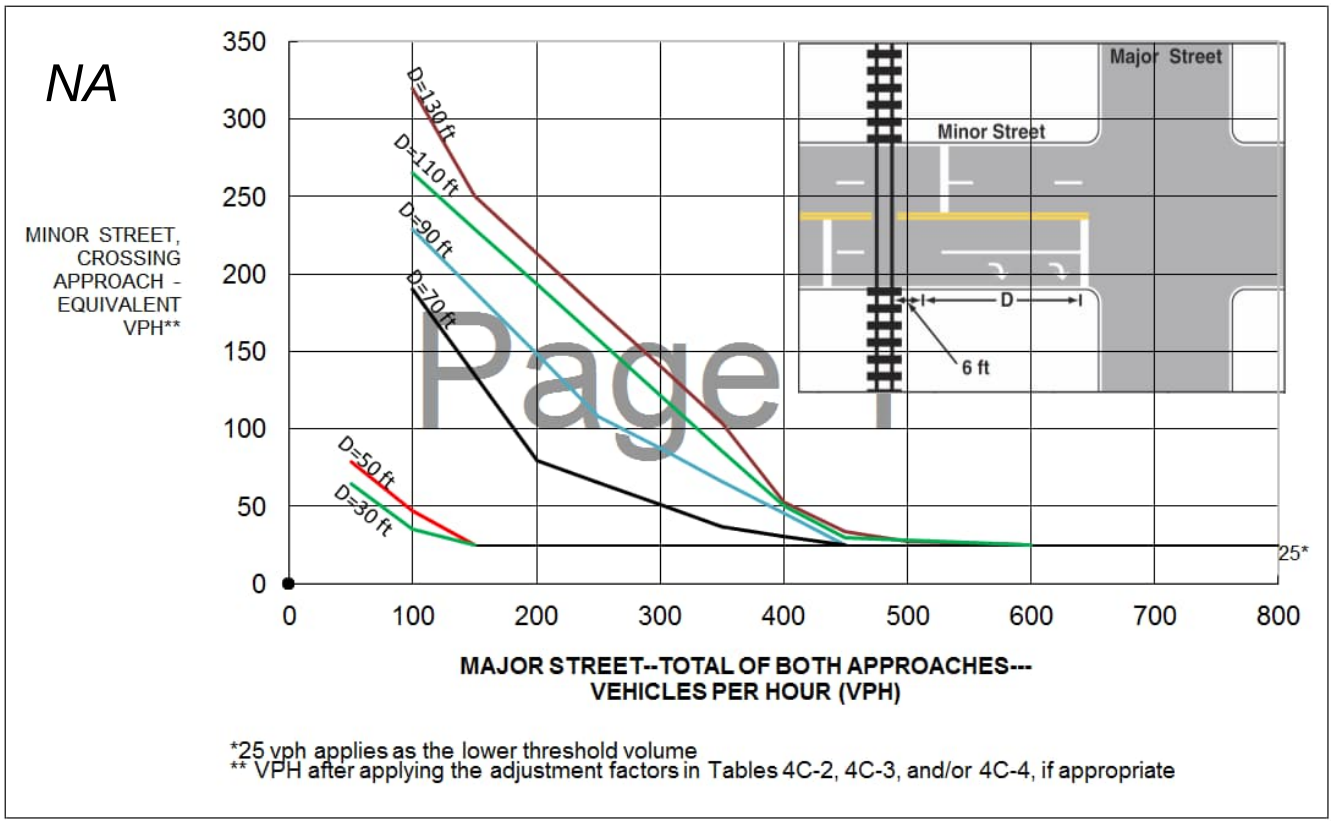


Figure 10. Railroad Grade Crossing (Two or More Approach Lanes at the Track Crossing) (Warrant 9.)

Table 4C-2. Warrant 9, Adjustment Factor for Daily Frequency of Rail Traffic

Rail Traffic per Day	Adjustment Factor
1	0.67
2	0.91
3 to 5	1.00
6 to 8	1.18
9 to 11	1.25
12 or more	1.33

Table 4C-3. Warrant 9, Adjustment Factor for Percentage of High-Occupancy Buses

% of High-Occupancy Buses* on Minor-Street Approach	Adjustment Factor
0%	1.00
2%	1.09
4%	1.19
6% or more	1.32

* A high-occupancy bus is defined as a bus occupied by at least 20 people.

Table 4C-4. Warrant 9, Adjustment Factor for Percentage of Tractor-Trailer Trucks

% of Tractor-Trailer Trucks on Minor-Street Approach	Adjustment Factor	
	D less than 70 feet	D of 70 feet or more
0% to 2.5%	0.50	0.50
2.6% to 7.5%	0.75	0.75
7.6% to 12.5%	1.00	1.00
12.6% to 17.5%	2.30	1.15
17.6% to 22.5%	2.70	1.35
22.6% to 27.5%	3.28	1.64
More than 27.5%	4.18	2.09

Remarks:

Traffic Survey - Count Analysis

2011 TMUTCD Warrants

County: Bexar District: San Angelo

City: San Antonio Population: 200,000 Survey Date: 7/18/2029

	Route #	Name	Control	Section	85% Speed
Major	0	Commerce St			35 MPH
Minor	0	Rosillo St			30 MPH

Eight Highest Hours: Include the same 8 hours for the Major and Minor St. volumes.

Time Ends	Major St. - Both App.		Minor St. - Hi. Vol. App.	
	Veh. Total	Ped. Total	Veh. Total	Ped. Total
6:00 PM	1,654	16	272	
5:00 PM	1,514	23	280	
4;00 PM	1,314	0	245	
1:00 PM	1,187	0	238	
3:00 PM	1,162	0	229	
7:00 PM	1,110	0	232	
2:00 PM	1.107	0	226	
12 NOON	1,009	0	219	

Comments:

Analysis period- 2029

Recommendation- A Traffic signal is warranted at this intersection.

Warrant 1. Eight Hour Vehicular Volume

☒ Yes ☐ No Meets 70%[c] (major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition A.

- or -

☒ Yes ☐ No Meets 70%[c] (major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition B.

- or -

☒ Yes ☐ No Meets 80%[b] of Conditions A and B.

- or -

☐ Yes ☒ No Meets 56%[d] of Conditions A and B (major-street speed exceeds 40 mph or population less than 10,000).

Condition A - Minimum Vehicle Volume

Number of Lanes		Vehicles per hour on Major St. (Total of both Approaches)					Vehicles per hour on higher-volume Minor St. approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	168.2%	100%[a]	80%[b]	70%[c]	56%[d]	145.8%
1	1	500	400	350	280	0	150	120	105	84	0
2 or more	1	600	480	420	336	1008.99	150	120	105	84	218.67
2 or more	2 or more	600	480	420	336	0	200	160	140	112	0
1	2 or more	500	400	350	280	0	200	160	140	112	0

Condition B - Interruption of Continuous Traffic

Number of Lanes		Vehicles per hour on Major St. (Total of both Approaches)					Vehicles per hour on higher-volume Minor St. approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	112.1%	100%[a]	80%[b]	70%[c]	56%[d]	291.6%
1	1	750	600	525	420	0	75	60	53	42	0
2 or more	1	900	720	630	504	1008.99	75	60	53	42	218.67
2 or more	2 or more	900	720	630	504	0	100	80	70	56	0
1	2 or more	750	600	525	420	0	100	80	70	56	0

[a] Basic minimum hourly volume.

[b] Used for combination of Conditions A and B after adequate trial of other remedial measures.

[c] May be used when the major-street speed exceeds 40 mph or in a community with a population less than 10,000.

[d] May be used for combination of Conditions A and B after adequate trial of other remedial measures when major street exceeds 40 mph or in an isolated community with a population of less than 10,000.

Warrant 2. Four Hour Volumes

☑ Yes ☐ No	Meets each of 4 Highest Hours (Warrant 2 — see Figure 1).

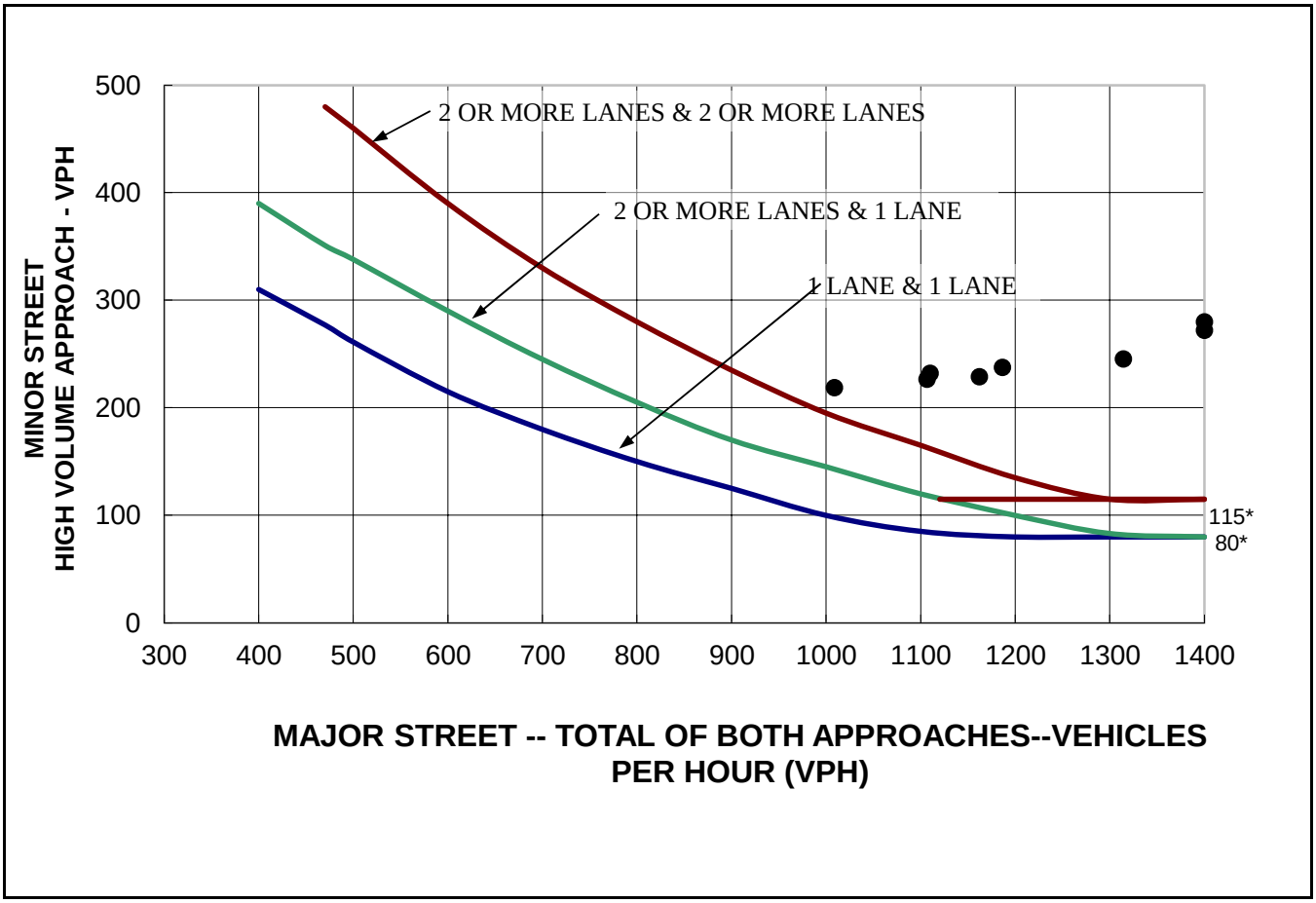
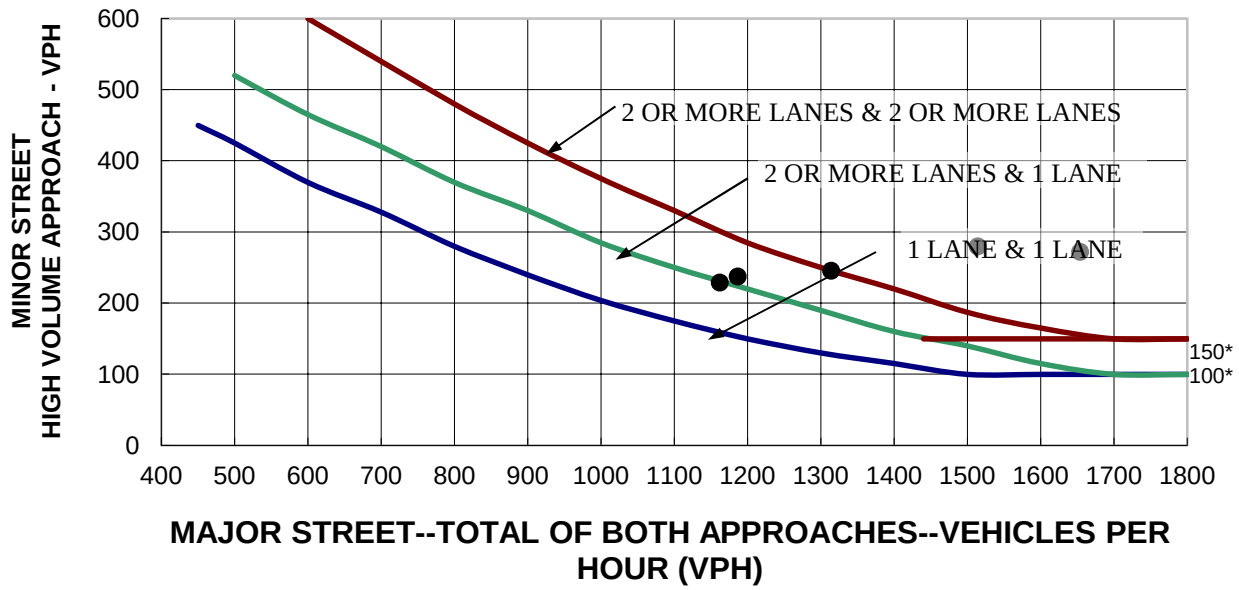


Figure 1. Four-hour volume warrant. (Warrant 2.)

Warrant 3. Peak Hour

☐ Yes ☑ No	Are all of the following conditions true for any four consecutive 15 minute periods? 1. The total stopped time delay experienced by the traffic on one minor street approach (one direction only) controlled by a stop sign equals or exceeds 4 vehicle-hours for a one-lane approach and 5 vehicle-hours for a two-lane approach, *and* 2. The volume of the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes, *and* 3. The total entering volume serviced during the hour equals or exceeds 650 vph for intersections with three approaches or 800 vph for intersections with four (or more) approaches.
	– or –
☑ Yes ☐ No	Meets one High Hour (Warrant 3 — see Figure 2).



***Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.**

Figure 2. Peak hour volume warrant. (Warrant 3.)

Warrant 4. Four Hour Pedestrian Volume

☐ Yes ☒ No Meets each of 4 Highest Hours (Warrant 4 - see Figure 5 and Figure 6.)

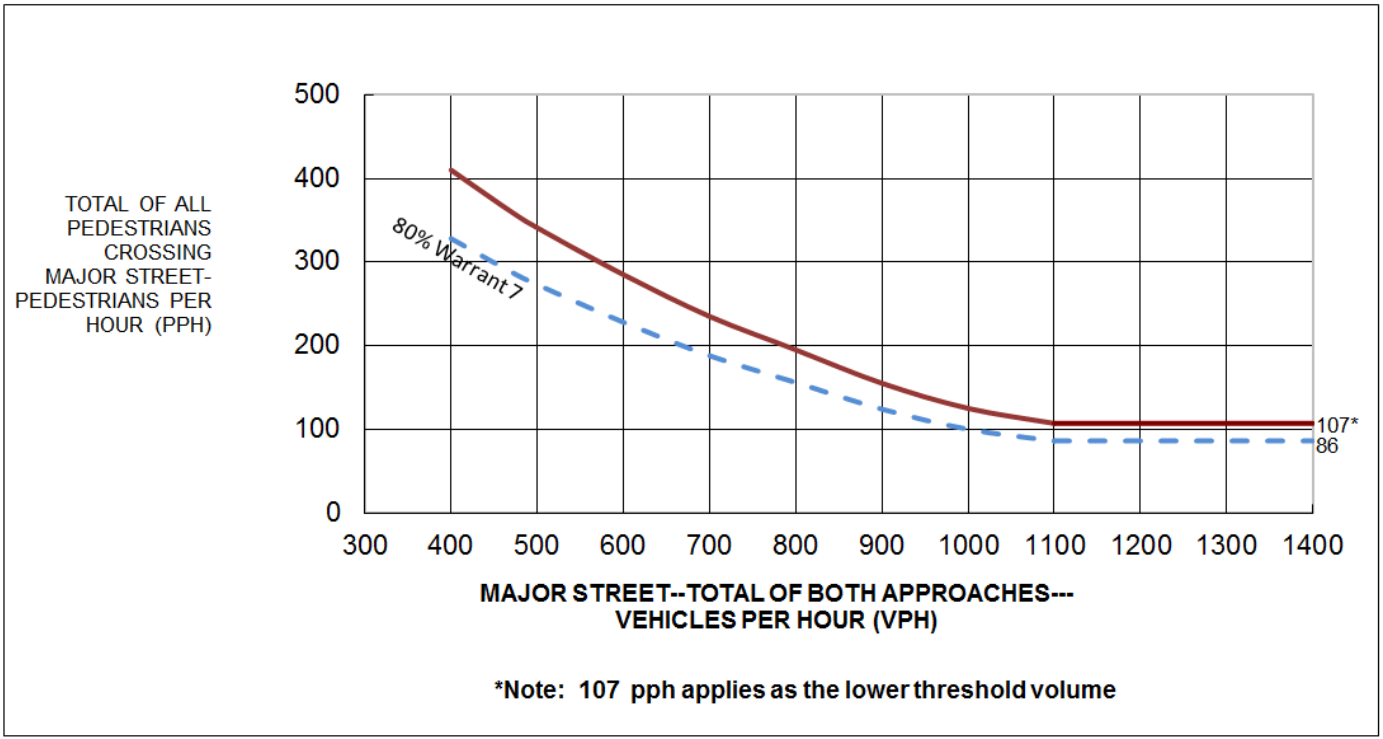


Figure 5. Four hour pedestrian warrant. (Warrant 4.)

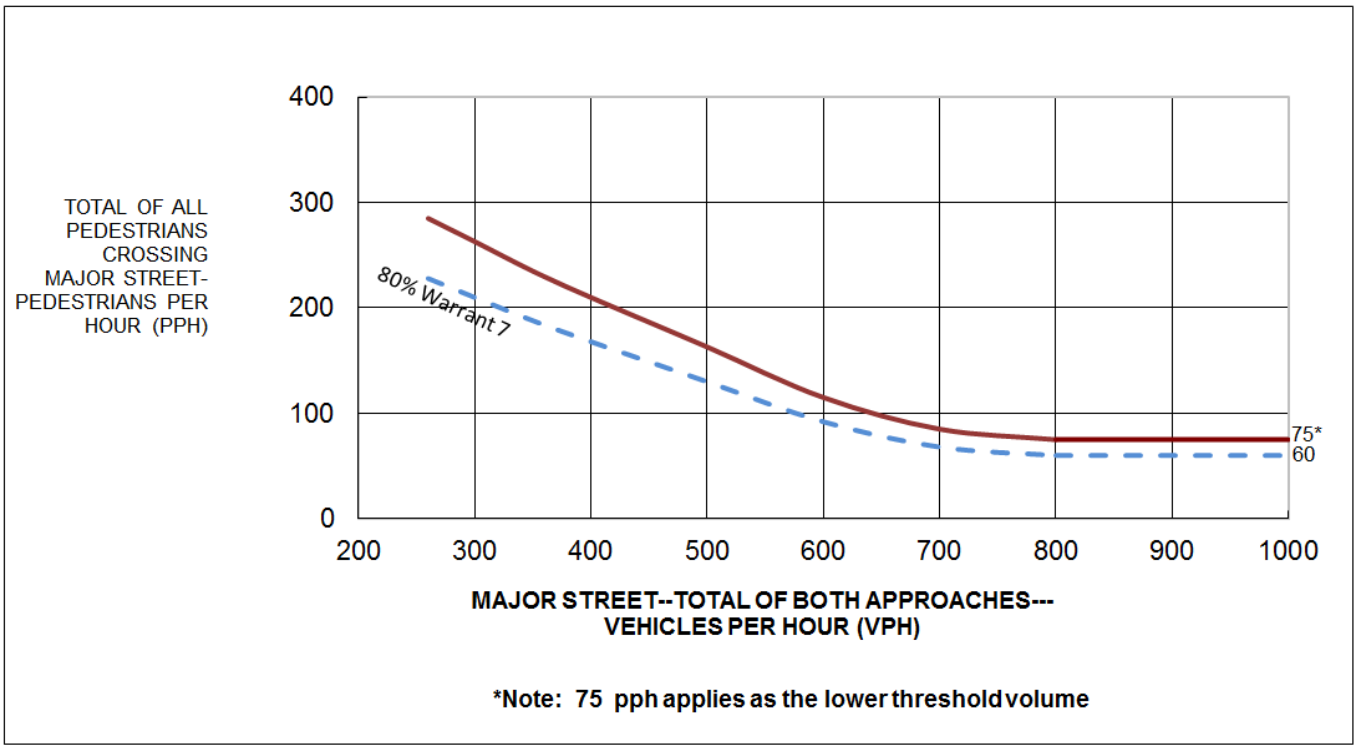


Figure 6. Four hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 35 MPH on major street). (Warrant 4.)

Warrant 4. Peak Hour Pedestrian Volumes

☐ Yes ☒ No Meets Peak Hour Pedestrian (Warrant 4 - see Figure 7 and Figure 8.)

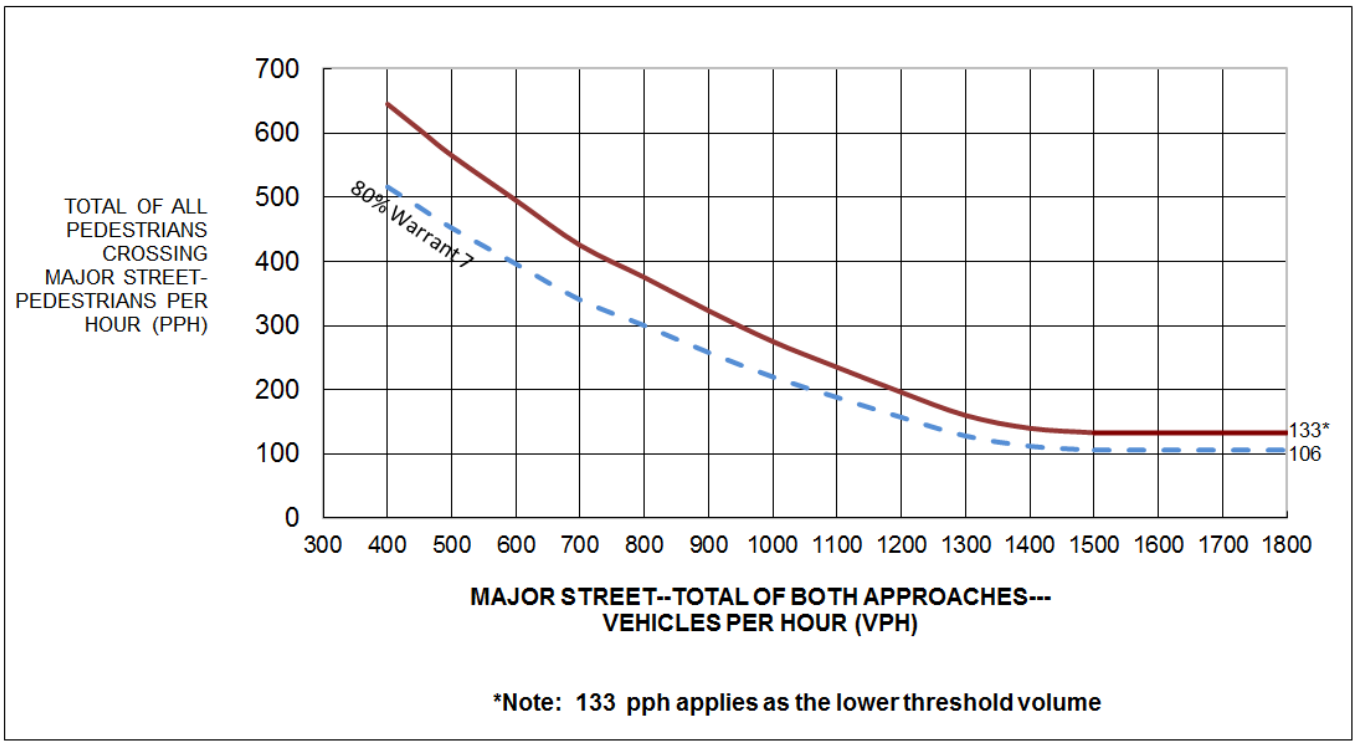


Figure 7. Four hour pedestrian warrant (Warrant 4.)

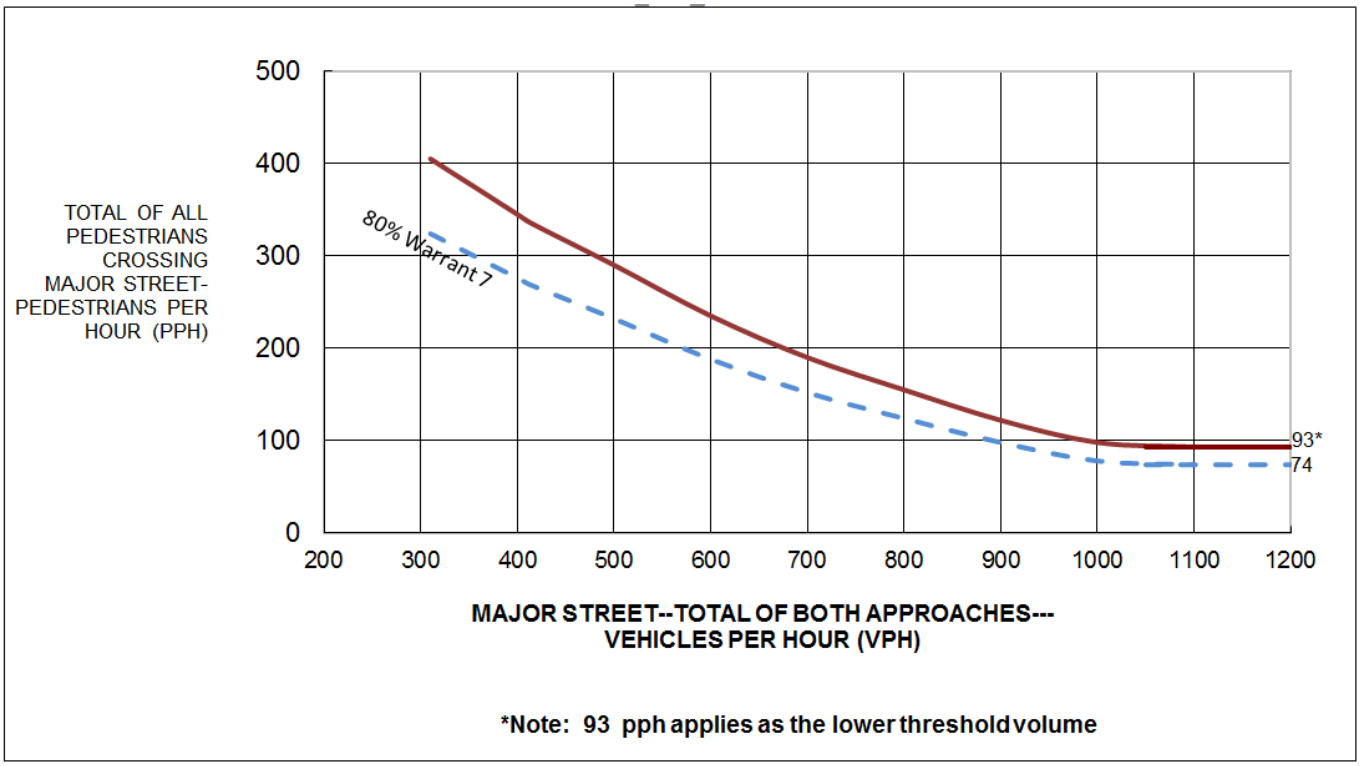


Figure 8. Peak hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 40 MPH on major street). (Warrant 4.)

Warrant 5. School Crossing

☐ Yes ☐ No	Is the number of adequate gaps in traffic stream during the period when the children are using the crossing less than the number of minutes in the same period?
NA	- ***and*** -
☐ Yes ☐ No	Are there a minimum of 20 students during the highest crossing hour?
	- ***and*** -
☐ Yes ☐ No	Is the nearest signal on the major street located more than 300 feet away? (This warrant may be applied if the proposed signal is less than 300 feet and does not restrict the progressive movement of traffic.)

Warrant 6. Coordinated Signal System

☐ Yes ☐ No	On a one-way street or a street with traffic predominantly in one direction, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur?
NA	- ***or*** -
☐ Yes ☐ No	On a two-way street, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur and would the proposed and adjacent traffic control signal provide a progressive operation?

Warrant 7. Crash Experience

☐ Yes ☒ No	Is one of the following conditions met?: ◆ 80% of Condition A or Condition B in Warrant 1 ◆ 56% of Conditions A or B in Warrant 1 (major-street speed exceeding 40 mph or population less than 10,000) ◆ 80% or more of Warrant 4
	- ***and*** -
☐ Yes ☒ No	Have there been 5 or more reported crashes susceptible to correction by a traffic signal in 12 months?

Warrant 8. Roadway Network

NA

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume on all approaches greater than 1000 vehicles for each of any 5 hours of a Saturday and/or Sunday.

- ***or*** -

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume greater than 1000 vehicles for the peak hour of a typical weekday, and do the 5 year projected traffic volumes meet one or more of Warrants 1, 2, and 3 during an average weekday?

Check applicable characteristics of each route (only 1 needs to be checked):

Major Street	Minor Street	
☐ Yes	☐ No	It is part of street or highway system that serves as the principal roadway network for through traffic flow.
☐ Yes	☐ No	It includes rural or suburban highways outside, entering, or traversing a city.
☐ Yes	☐ No	It appears as a major route on an official plan such as a major street plan in an urban area traffic and transportation study.
☐ Yes	☐ No	It connects areas of principal traffic generation.
☐ Yes	☐ No	It has surface street freeway or expressway ramp terminals.

Warrant 9. Intersection Near a Grade Crossing (One Approach Lane at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 9.)

NA

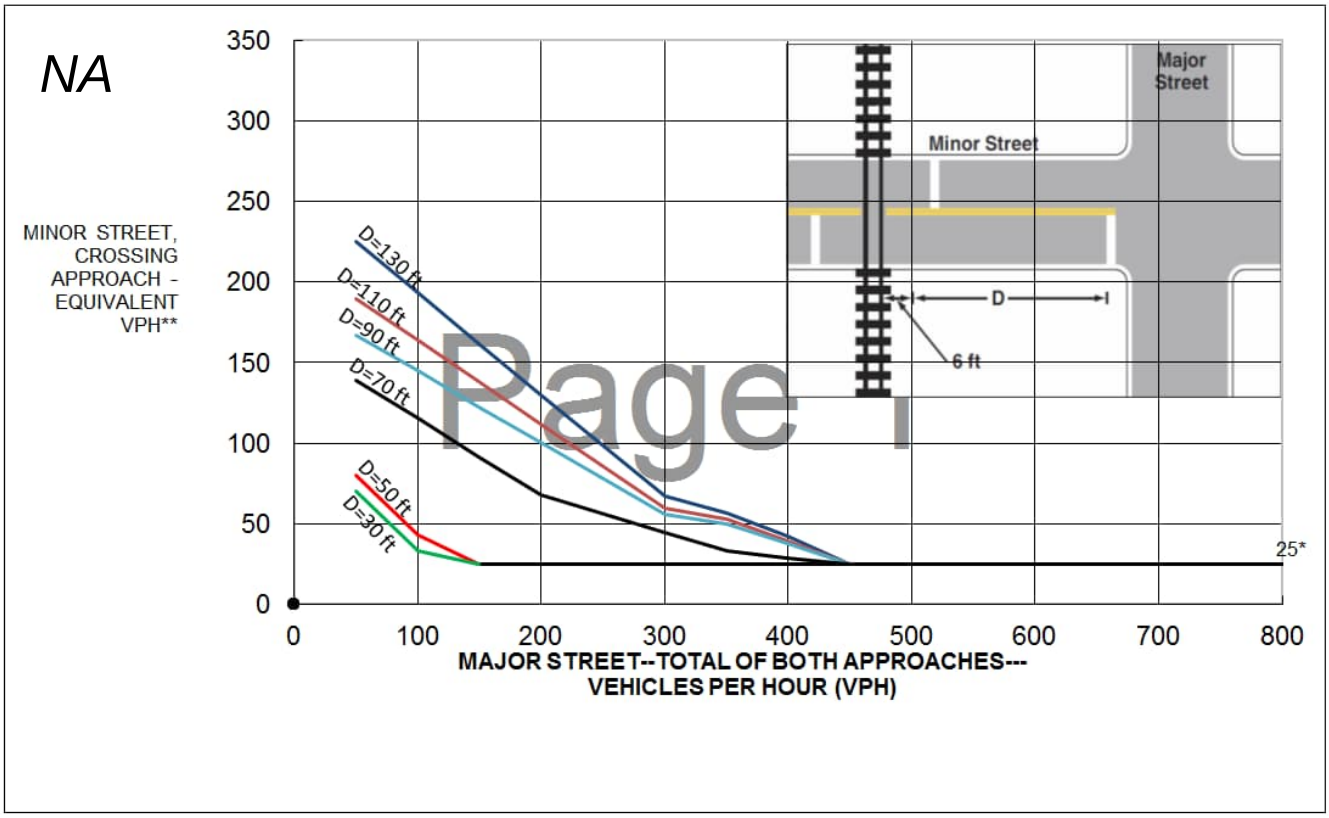


Figure 9. Railroad Grade Crossing (One Approach Lane at the Track Crossing) (Warrant 9.)

Warrant 9. Intersection Near a Grade Crossing (Two or More Approach Lanes at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 10.)

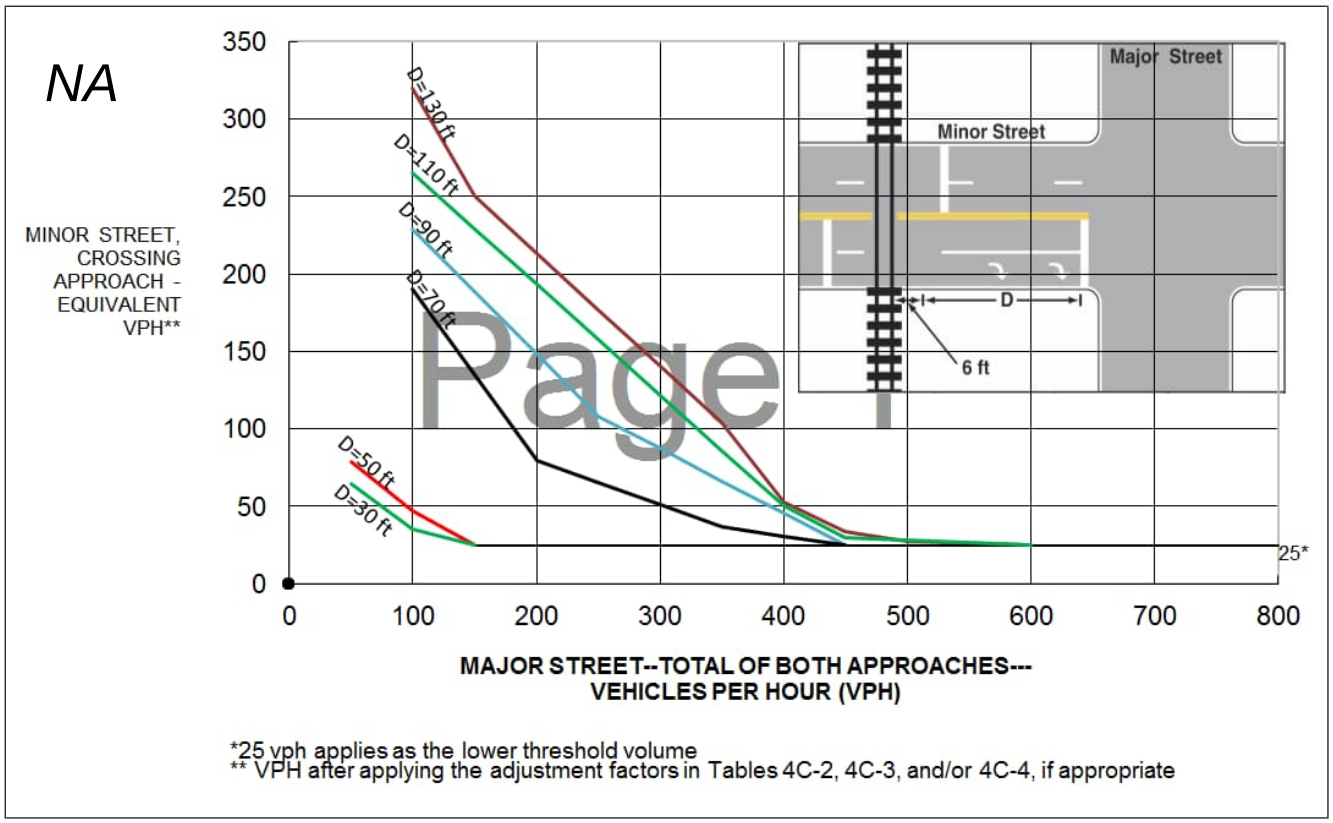


Figure 10. Railroad Grade Crossing (Two or More Approach Lanes at the Track Crossing) (Warrant 9.)

Table 4C-2. Warrant 9, Adjustment Factor for Daily Frequency of Rail Traffic

Rail Traffic per Day	Adjustment Factor
1	0.67
2	0.91
3 to 5	1.00
6 to 8	1.18
9 to 11	1.25
12 or more	1.33

Table 4C-3. Warrant 9, Adjustment Factor for Percentage of High-Occupancy Buses

% of High-Occupancy Buses* on Minor-Street Approach	Adjustment Factor
0%	1.00
2%	1.09
4%	1.19
6% or more	1.32

* A high-occupancy bus is defined as a bus occupied by at least 20 people.

Table 4C-4. Warrant 9, Adjustment Factor for Percentage of Tractor-Trailer Trucks

% of Tractor-Trailer Trucks on Minor-Street Approach	Adjustment Factor	
	D less than 70 feet	D of 70 feet or more
0% to 2.5%	0.50	0.50
2.6% to 7.5%	0.75	0.75
7.6% to 12.5%	1.00	1.00
12.6% to 17.5%	2.30	1.15
17.6% to 22.5%	2.70	1.35
22.6% to 27.5%	3.28	1.64
More than 27.5%	4.18	2.09

Remarks:

MEMO

TO: Project File

FROM: Michael Trueblood, PE, PTOE, Jemal Ali, PE, PTOE

SUBJECT: Traffic Signal Warrant Analysis – Commerce St at Picoso St and Buena Vista St at Picoso St

DATE: April 10, 2025

Summary

As part of VIA E/W Build project, WSP conducted traffic control signal and pedestrian hybrid beacon warrant analyses at the following intersections. The intersections are currently under two-way stop control, with stops on the minor streets.

1. Commerce Street at Picoso Street
2. Buena Vista Street at Picoso Street

The study intersections are located in the city of San Antonio. Year 2019 and 2029 traffic volumes were summarized and evaluated in accordance with the Warrants provided in the Texas Manual on Uniform Traffic Control Devices (TMUTCD). The two study intersections are shown in Figure 1.

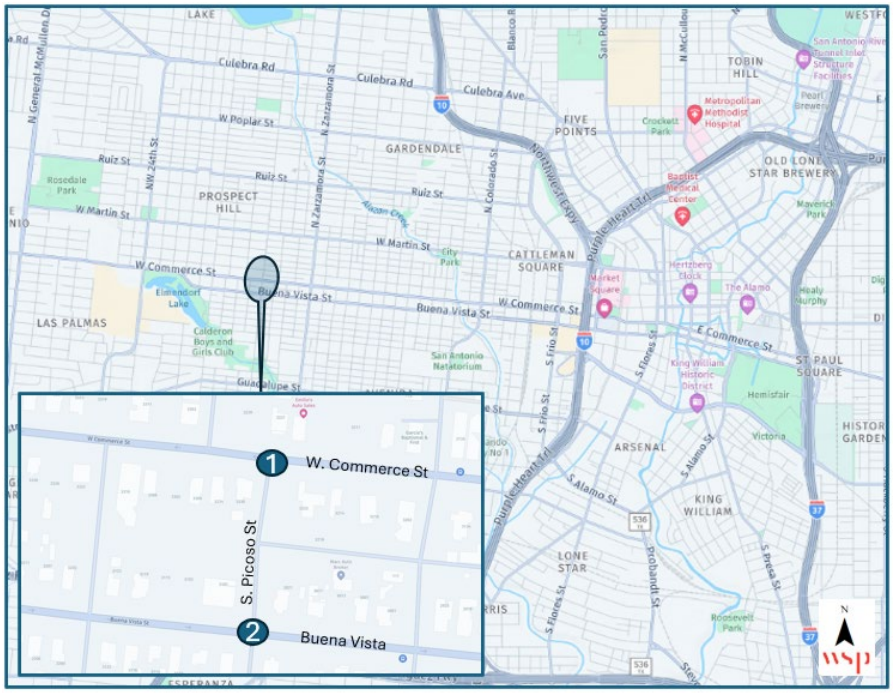


Figure 1: Study Intersection Locations

WSP USA
Suite 325D
1601 S Mopac Expressway
Austin, TX 78746
wsp.com

The Traffic Signal Warrant Analyses were performed to determine whether the intersections would meet the generally accepted guidelines for signal warrants presented in the Texas Manual on Uniform Traffic Control Devices (TMUTCD) for traffic signal.

The Texas Manual on Uniform Traffic Control Devices (TMUTCD) Signal Warrants 1, 2, 3, 4, 6 and 7 were evaluated. Based on the results of the traffic signal warrant analysis we offer the following conclusions and recommendations:

- **Based on this study, a traffic signal is not warranted at the intersection of Commerce Street at Picoso Street and Buena Vista Street at Picoso Street.**

Intersection Features

The project intersections are located in Bexar County in the City of San Antonio, Texas. The population of the urban area is around 200,000. While the major streets Commerce Street and Buena Vista Street run east-west direction, the minor crossing street Picoso Street runs north-south. The number of lanes for major and minor streets are 2 and 1 respectively. The streets have a speed limit of 35 mph for the major direction and 30 mph for minor direction. No railroad crosses either street within 140 feet of the study intersections, and they are not located near any school. The existing intersections are four-legged stop-controlled intersections with stops on the minor streets.

Traffic Data

Intersection turning movement counts (TMC) were performed in 15-minute intervals for a four-hour period from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM on July 18, 2019. The traffic counts were tabulated to calculate hourly and peak hour Traffic volumes.

In addition to the TMCs, hourly traffic profiles were extracted from STARS along the roads in the surrounding area to estimate the 24-hour traffic volumes. A growth factor of 1.11 along Commerce Street and 1.14 along Buena Vista Street were applied to tabulate the 2029 traffic volumes.

The following steps and assumptions were taken to develop the traffic volumes for the traffic signal warrant analyses:

- Traffic volumes from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM are used from the TMC counts for Buena Vista Street at Picoso Street
- Traffic counts were not available for the Commerce Street at Picoso Street intersection. The volumes were estimated based on available counts from adjacent intersections, along with the pedestrian counts.
- To estimate the 8-hour traffic volume on the major and minor approach,
    - The available 24-hr STAR traffic volume profiles for major and minor streets of the surrounding network were used to develop a 24-hr volume profile.
    - Develop a factor – a ratio of the average peak period counts to the corresponding peak period of the STARS counts.
    - Apply the factor to the 24-hr volume STARS profile to calculate the traffic volumes.

The four-hour vehicular and pedestrian volumes, crash data tables, STARS volume data, and estimated 24-hour traffic volumes for each intersection approach that were used for the analyses are included in **Appendix A.**

Signal Warrant Analysis

Traffic Signal Warrant Analyses was performed to determine the warrant for the installation of fully operational traffic signals at the study intersections that would meet generally accepted guidelines outlined in the Texas Manual for Uniform Traffic Control Devices (TMUTCD), Chapter 4C.

The TMUTCD cites eight different signal warrants to determine the installation of a traffic control signal justification at a particular location. For the purpose of this analyses, warrants 1, 2, 3, 4, 6 and 7 are checked for traffic warrant. The warrants and their application as shown in the TMUTCD are listed below:

Warrant 1: Eight-Hour Vehicular Volume

The Minimum Vehicular Volume, Condition A, is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal. Minimum volume criteria must be met for 8 hours of the day for the major street and minor street approaches.

The Interruption of Continuous Traffic, Condition B, is intended for application where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict entering or crossing the major street. Minimum volume criteria must be met for 8 hours of the day for the major street and minor street approaches.

Eight-Hour Vehicular Volume normally requires that the traffic volumes meet the minimum vehicles per hour shown in the 100 percent columns of Condition A or B in Table 4C-1 of the TMUTCD for 8 hours of an average day or 80% of both Condition A and B met.

Warrant 2: Four-Hour Vehicular Volume

Intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic control signal. Minimum volume criteria must be met for 4 hours of the day for the major street and minor street approaches.

Four-Hour Vehicular Volume normally requires that the plotted points for 4 separate hours representing the vehicles per hour on the major and minor streets exceed the applicable curve shown in TMUTCD Figure 4C-1.

Warrant 3: Peak Hour

Intended for use at a location where traffic conditions are such that for a minimum of one hour of an average day, the minor street traffic suffers undue delay entering or crossing the major street. There are two conditions offered for this warrant. If either condition is met, then Warrant 3 is satisfied.

Condition A – If the delay of the controlled minor-street approach exceeds 4 hours and the minor-street approach volume is at least 100 vehicles per hour and the total entering volume is at least 800 vehicles per hour then Warrant 3A is met. No data available for this warrant and it has not been assessed,

Condition B – Minimum volume criteria must be met for 1 hour of the day for the major street and minor street approaches.

Warrant 3 is satisfied when either Condition A or B is met.

Warrant 4: Pedestrian Volume
Intended for application where the traffic volume on a major street is so heavy that pedestrians experience excessive delay in crossing the major street. There are two conditions offered for this warrant. If either condition is met, then Warrant 4 is satisfied.
Condition A - Four-Hour Pedestrian Volume normally requires that the plotted points for 4 separate hours representing the vehicles per hour on the major and minor streets exceed the applicable curve shown in TMUTCD Figure 4C-5.

Condition B – Minimum volume criteria must be met for 1 hour of the day for the major street and minor street approaches, with one plotted point exceeding the applicable curve shown in TMUTCD Figure 4C-7.

Warrant 6: Coordinated Signal System
Intended for application where an engineering study finds that one of the following criteria is met:
A - On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.
B - On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning, and the proposed and adjacent traffic control signals will collectively provide a progressive operation.

The Coordinated Signal System signal warrant should not be applied where the resultant spacing of traffic control signals would be less than 1,000 feet.

Warrant 7: Crash Experience
Intended for application where the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal. There are three conditions offered for this warrant. If all the conditions are met, then Warrant 7 is satisfied.
Condition A - Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.
Condition B - Five or more reported crashes, of types susceptible to correction by a traffic control signal, have occurred within a 12-month period, each crash involving personal injury or property damage.
Condition C - Minimum volume criteria must be met for any 8 hours of the day for the major street and minor street approaches.

For the existing geometry analysis, the thresholds for the above Warrants were checked. The results presented in **Table 1** indicate which warrants are met for each intersection. As shown, no warrants are met for both Commerce Street at Picoso Street and Buena Vista Street at Picoso Street intersections for the years 2019 and 2029. The signal warrant worksheets are attached in **Appendix B** of this memo.

Table 1 - Signal Warrant Analyses Results

Warrant	Description	Intersections			
		Commerce at Picoso Street		Buena Vista at Picoso Street	
		2019	2029	2019	2029
Warrant 1A	Eight-Hour Vehicular Volume	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
Warrant 1B	Eight-Hour Vehicular Volume	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
Warrant 2	Four-Hour Vehicular Volume	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
Warrant 3A	Peak Hour	NA	NA	NA	NA
Warrant 3B	Peak Hour	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
Warrant 4A	Pedestrian Volume	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
Warrant 4B	Pedestrian Volume	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
Warrant 5	School Crossing	NA	NA	NA	NA
Warrant 6A	Coordinated Signal System	NA	NA	NA	NA
Warrant 6B	Coordinated Signal System	NA	NA	NA	NA
Warrant 7A	Crash Experience	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
Warrant 7B	Crash Experience	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
Warrant 7C	Crash Experience	Not Satisfied	Not Satisfied	Not Satisfied	Not Satisfied
Warrant 8A	Roadway Network	NA	NA	NA	NA
Warrant 8B	Roadway Network	NA	NA	NA	NA
Warrant 9	Intersection Near a Grade Crossing	NA	NA	NA	NA
Signal Warranted?		**NO**	**NO**	**NO**	**NO**

Based on the review of the warrants, the intersections of **Commerce Street at Picoso Street and Buena Vista Street at Picoso Street do not warrant traffic signals**.

Pedestrian Hybrid Beacon (PHB) Warrant Analysis

Pedestrian Hybrid Beacon (PHB) also known as High-Intensity Activated cross WalK beacon (HAWK signal) is a traffic control device used to warn and control traffic at an unsignalized locations to assist pedestrians in crossing a street or highway at a marked crosswalk. As per MUTCD Chapter 4F, a PHB may be considered for installation to facilitate pedestrian crossings at a location that does not meet traffic signal warrants or at a location that meets traffic signal warrants under Sections 4C.05 (Pedestrian Volume warrant) and/or 4C.06 (School Crossing warrant) but a decision is made to not install a traffic control signal.

Existing Condition

The criteria set out by TMUTCD, and other factors considered for installation of Pedestrian Hybrid Beacon were analyzed and can be seen below in **Table 2**.

Table 2 - Pedestrian Hybrid Beacon (PHB) Warrant Analysis Criteria

Criteria	Minimum Values	Current Values		Criteria Met?
		Commerce at Picoso Street	Buena Vista at Picoso Street	
Traffic Signal Justified as per TMUTCD Section 4C	Signal warrant met	NO	NO	**NO**
Traffic Signal Not Justified as per TMUTCD Section 4C	Gaps insufficient, speed too high, or pedestrian delay excessive	NO	NO	**NO**
Pedestrian Volume Thresholds (Section 4F.01): Speed ≤ 35mph and Volume vs. pedestrian volume lies above curve in TMUTCD Figure 4F-1. The MUTCD recommends that a PHB be considered if at least 20 pedestrians per hour (pph) cross the street at a particular location during the busiest hour of the day.	Speed <35mph and Fig 4F-1 (Min. 20pph)	3 pph	3 pph	**NO**
Pedestrian Volume Thresholds (Section 4F.01): Speed > 35mph and Volume vs. pedestrian volume lies above curve in TMUTCD Figure 4F-2. The MUTCD recommends that a PHB be considered if at least 20 pedestrians per hour (pph) cross the street at a particular location during the busiest hour of the day.	Speed >35mph and Fig 4F-2. (Min. 20pph)	3 pph	3 pph	**NO**
Proximity to School	School crossing (Min. 20pph)	No	No	**No**
PHB Warranted?		**NO**	**NO**	**NO**

Based on a review of the current traffic counts and Pedestrian Hybrid Beacon (PHB) warrants, the intersections of Commerce Street at Picoso Street and Buena Vista Street at Picoso Street currently experience low pedestrian and bicycle volumes. Additionally, there are no schools located near these

intersections. As such, criteria to warrant a PHB was not met and the installation of PHBs at these locations are not recommended under present conditions.

Future Condition

With the future implementation of the VIA East-West Bus Rapid Transit (BRT) line operating along the Commerce Street and Buena Vista Street corridors, a proposed BRT stop at Picoso Street is expected to generate approximately 250 daily riders. This level of ridership is anticipated to result in more than 20 pedestrians per hour (pph) crossing both Commerce Street and Buena Vista Street at the Picoso Street intersection.

To enhance pedestrian safety at these intersections, it is essential to implement measures that address potential conflicts between pedestrians and vehicles. While current pedestrian volumes and crash history do not meet the criteria for PHB installation, the projected increase in pedestrian activity due to the proposed BRT service supports the recommendation to install PHBs at the intersections of Commerce Street and Buena Vista Street at Picoso Street at Picoso Street.

Recommendations

- Based on the available traffic volumes, projections, crash data, and assumptions presented in this memorandum, none of the traffic signal warrants are currently met at the intersections of Commerce Street at Picoso Street and Buena Vista Street at Picoso Street.
- Similarly, under existing condition, neither intersection warrants the installation of a Pedestrian Hybrid Beacon (PHB). However, the anticipated increase in pedestrian activity associated with the proposed BRT service supports the recommendation to install PHBs at both intersections in the future.

Appendix A – 24HR Estimated Traffic Volumes and Crash Map

Peak Period Counts

Count at intersection - 2019

	Minor		Major
	Picoso St (NB)	Picoso St (SB)	BUENA VISTA
7:00 AM	3	3	664
8:00 AM	4	3	485
4:00 PM	10	8	491
5:00 PM	8	13	540

Count at intersection - 2019

	Minor		Major
	Picoso St (NB)	Picoso St (SB)	W COMMERCE
7:00 AM	4	3	514
8:00 AM	5	3	566
4:00 PM	4	8	997
5:00 PM	5	13	1079

2019 - 24 Hr Counts Estimate

Actual Count at intersection

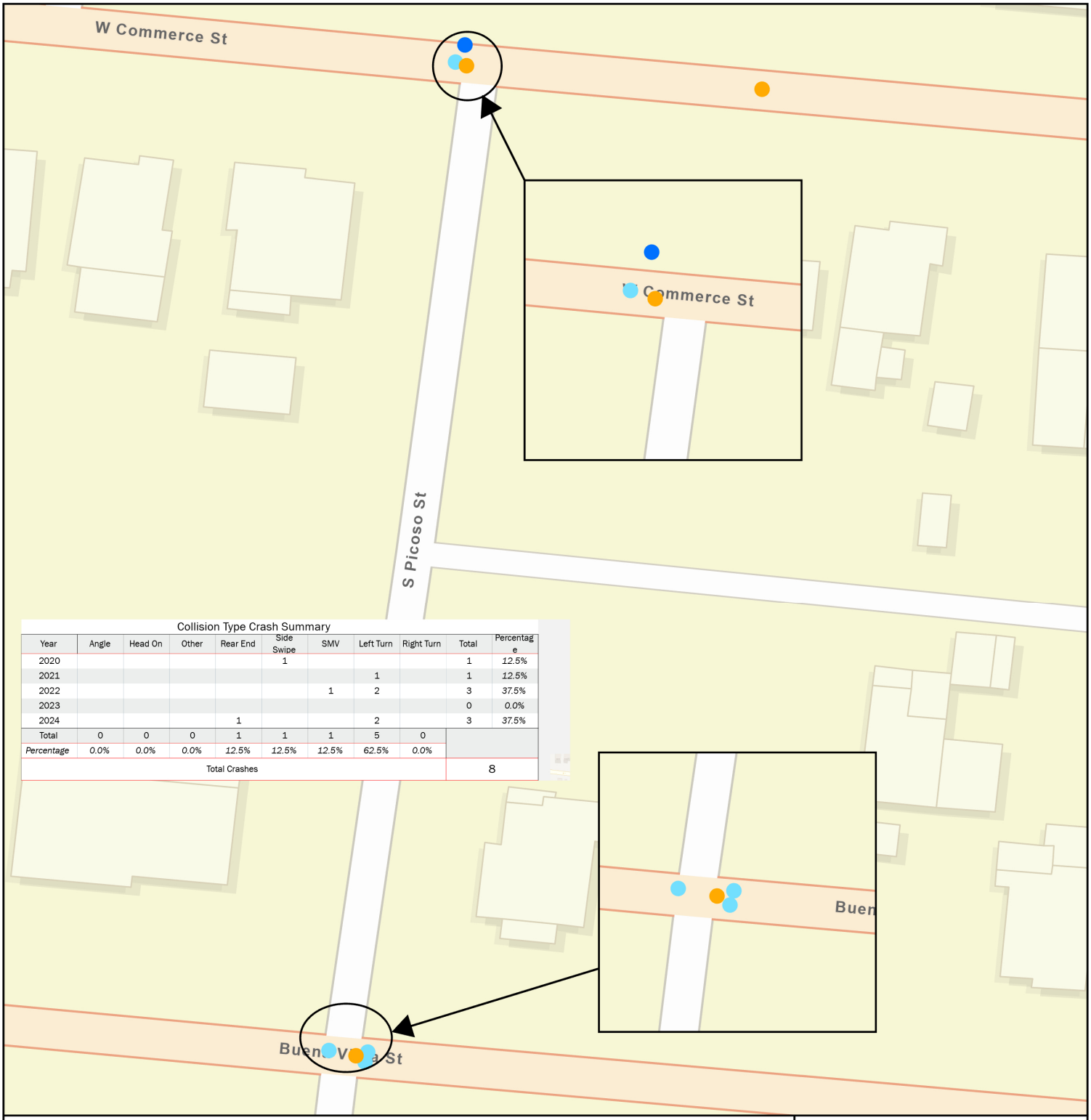
	Minor		Major
	Picoso St (NB)	Picoso St (SB)	BUENA VISTA
6:00 AM	1	2	423
7:00 AM	5	5	682
8:00 AM	6	6	509
9:00 AM	3	4	399
10:00 AM	4	4	397
11:00 AM	4	4	434
12:00 PM	4	4	528
1:00 PM	5	5	522
2:00 PM	5	5	475
3:00 PM	6	6	530
4:00 PM	10	8	507
5:00 PM	8	13	540
6:00 PM	7	7	420
7:00 PM	5	5	407
8:00 PM	4	4	358
9:00 PM	2	3	257
10:00 PM	1	1	176
11:00 PM	1	1	121
12:00 AM	0	0	72
1:00 AM	0	0	48
2:00 AM	0	0	30
3:00 AM	0	0	36
4:00 AM	0	0	45
5:00 AM	1	1	151

Actual Count at intersection

	Minor		Major
	Picoso St (NB)	Picoso St (SB)	W COMMERCE
6:00 AM	1	2	265
7:00 AM	4	5	514
8:00 AM	5	6	566
9:00 AM	2	4	576
10:00 AM	3	4	662
11:00 AM	3	4	737
12:00 PM	3	4	867
1:00 PM	3	5	808
2:00 PM	3	5	849
3:00 PM	4	6	960
4:00 PM	5	8	1106
5:00 PM	6	13	1208
6:00 PM	5	7	811
7:00 PM	4	5	642
8:00 PM	3	4	575
9:00 PM	2	3	393
10:00 PM	1	1	278
11:00 PM	1	1	198
12:00 AM	0	0	106
1:00 AM	0	0	70
2:00 AM	0	0	45
3:00 AM	0	0	42
4:00 AM	0	0	67
5:00 AM	0	1	135

2029 Projected Traffic Volumes- 24 Hr Counts Estimate

	Actual Count at intersection			Actual Count at intersection		
	Minor		Major	Minor		Major
	Picoso St (NB)	Picoso St (SB)	BUENA VISTA	Picoso St (NB)	Picoso St (SB)	W COMMERCE
6:00 AM	1	2	423	1	2	265
7:00 AM	5	5	682	4	5	514
8:00 AM	6	6	509	5	6	566
9:00 AM	3	4	399	2	4	576
10:00 AM	4	4	397	3	4	662
11:00 AM	4	4	434	3	4	737
12:00 PM	4	4	528	3	4	867
1:00 PM	5	5	522	3	5	808
2:00 PM	5	5	475	3	5	849
3:00 PM	6	6	530	4	6	960
4:00 PM	10	8	507	5	8	1106
5:00 PM	8	13	540	6	13	1208
6:00 PM	7	7	420	5	7	811
7:00 PM	5	5	407	4	5	642
8:00 PM	4	4	358	3	4	575
9:00 PM	2	3	257	2	3	393
10:00 PM	1	1	176	1	1	278
11:00 PM	1	1	121	1	1	198
12:00 AM	0	0	72	0	0	106
1:00 AM	0	0	48	0	0	70
2:00 AM	0	0	30	0	0	45
3:00 AM	0	0	36	0	0	42
4:00 AM	0	0	45	0	0	67
5:00 AM	1	1	151	0	1	135



Collision Type Crash Summary

Year	Angle	Head On	Other	Rear End	Side Swipe	SMV	Left Turn	Right Turn	Total	Percentage
2020					1				1	12.5%
2021							1		1	12.5%
2022						1	2		3	37.5%
2023									0	0.0%
2024				1			2		3	37.5%
Total	0	0	0	1	1	1	5	0		
Percentage	*0.0%*	*0.0%*	*0.0%*	*12.5%*	*12.5%*	*12.5%*	*62.5%*	*0.0%*		
Total Crashes									8	

Picoso Street Crash Analyses

Crash Severity

- B - SUSPECTED MINOR INJURY (3)
- C - POSSIBLE INJURY (1)
- N - NOT INJURED (4)

N

0 0.5 1 2 3 4

Mi

Appendix B – Traffic Warrant Analyses Worksheets

Traffic Survey — Count Analysis

Form Revised 2/27/2012

2011 TMUTCD Warrants

County: Bexar District: San Angelo

City: San Antonio Population: 200,000 Survey Date: 7/18/2019

		Name	Control	Section	85% Speed
Major	0	Buena Vista			35 MPH
Minor	0	Picoso			30 MPH

Eight Highest Hours: Include the same 8 hours for the Major and Minor St. volumes.

Time Ends	Major St. - Both App.		Minor St. - Hi. Vol. App.	
	Veh. Total	Ped. Total	Veh. Total	Ped. Total
8:00 AM	683	0	5	
6:00 PM	551	3	13	
4:00 PM	539	0	6	
1:00 PM	534	0	4	
2:00 PM	529	0	5	
5:00 PM	517	3	10	
9:00 AM	511	0	6	
3:00 PM	483	0	5	

Comments:

Based on 2019 traffic volumes and crash analyses, Signal not warranted at Buena Vista and Picoso Street intersection.

Warrant 1. Eight Hour Vehicular Volume

☐ Yes ☑ No Meets 70%[c] (and major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition A.

– or –

☐ Yes ☑ No Meets 70%[c] (and major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition B.

– or –

☐ Yes ☑ No Meets 80%[b] of Conditions A and B.

– or –

☐ Yes ☑ No Meets 56%[d] of Conditions A and B (and major-street speed exceeds 40 mph or population less than 10,000).

Condition A - Minimum Vehicle Volume

Number of Lanes		Vehicles per hour on Major St (Total of Both Approaches)					Vehicles per hour on higher-volume Minor St approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	80.5%	100%[a]	80%[b]	70%[c]	56%[d]	3.4%
1	1	500	400	350	280	0	150	120	105	84	0
2 or more	1	600	480	420	336	483	150	120	105	84	5
2 or more	2 or more	600	480	420	336	0	200	160	140	112	0
1	2 or more	500	400	350	280	0	200	160	140	112	0

Condition B - Interruption of Continuous Traffic

Number of Lanes		Vehicles per hour on Major St (Total of Both Approaches)					Vehicles per hour on higher-volume Minor St approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	53.6%	100%[a]	80%[b]	70%[c]	56%[d]	6.8%
1	1	750	600	525	420	0	75	60	53	42	0
2 or more	1	900	720	630	504	483	75	60	53	42	5
2 or more	2 or more	900	720	630	504	0	100	80	70	56	0
1	2 or more	750	600	525	420	0	100	80	70	56	0

[a]Basic minimum hourly volume.

[b]Used for combination of Conditions A and B after adequate trial of other remedial measures.

[c]May be used when the major-street speed exceeds 40 mph or in a community with a population of less than 10,000.

[d]May be used for combination of Conditions A and B after adequat trial of other remedial measures when major street exceeds 40 mph or in an isolated community with a population of less than 10,000.

Warrant 2. Four Hour Volumes

☐ Yes ☑ No	Meets each of 4 Highest Hours (Warrant 2 — see Figure 1).

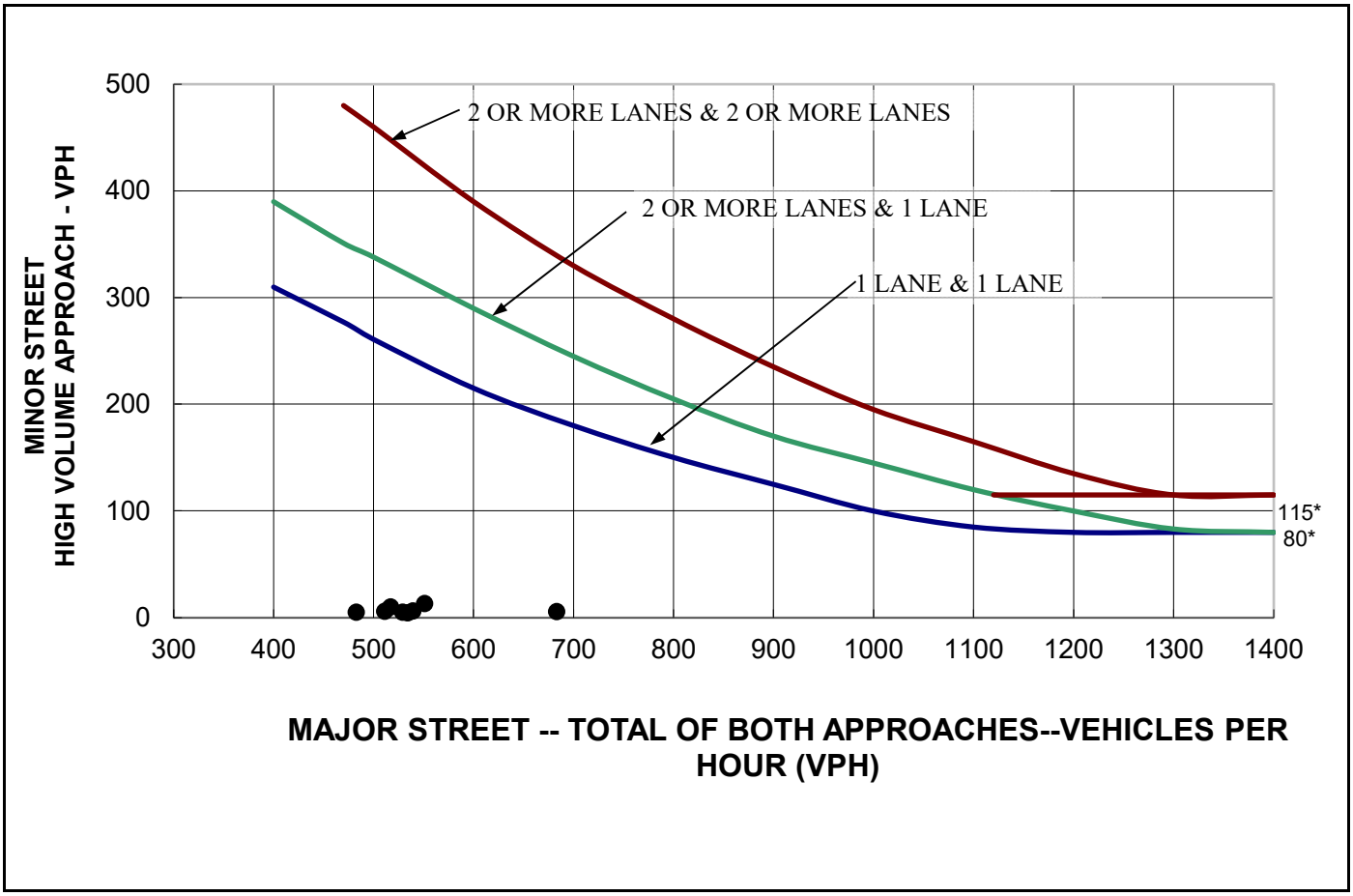


Figure 1. Four-hour volume warrant. (Warrant 2.)

Warrant 3. Peak Hour

☐ Yes ☑ No	Are all of the following conditions true for any four consecutive 15 minute periods? 1. The total stopped time delay experienced by the traffic on one minor street approach (one direction only) controlled by a stop sign equals or exceeds 4 vehicle-hours for a one-lane approach and 5 vehicle-hours for a two-lane approach, *and* 2. The volume of the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes, *and* 3. The total entering volume serviced during the hour equals or exceeds 650 vph for intersections with three approaches or 800 vph for intersections with four (or more) approaches.
	– or –
☐ Yes ☑ No	Meets one High Hour (Warrant 3 — see Figure 2).

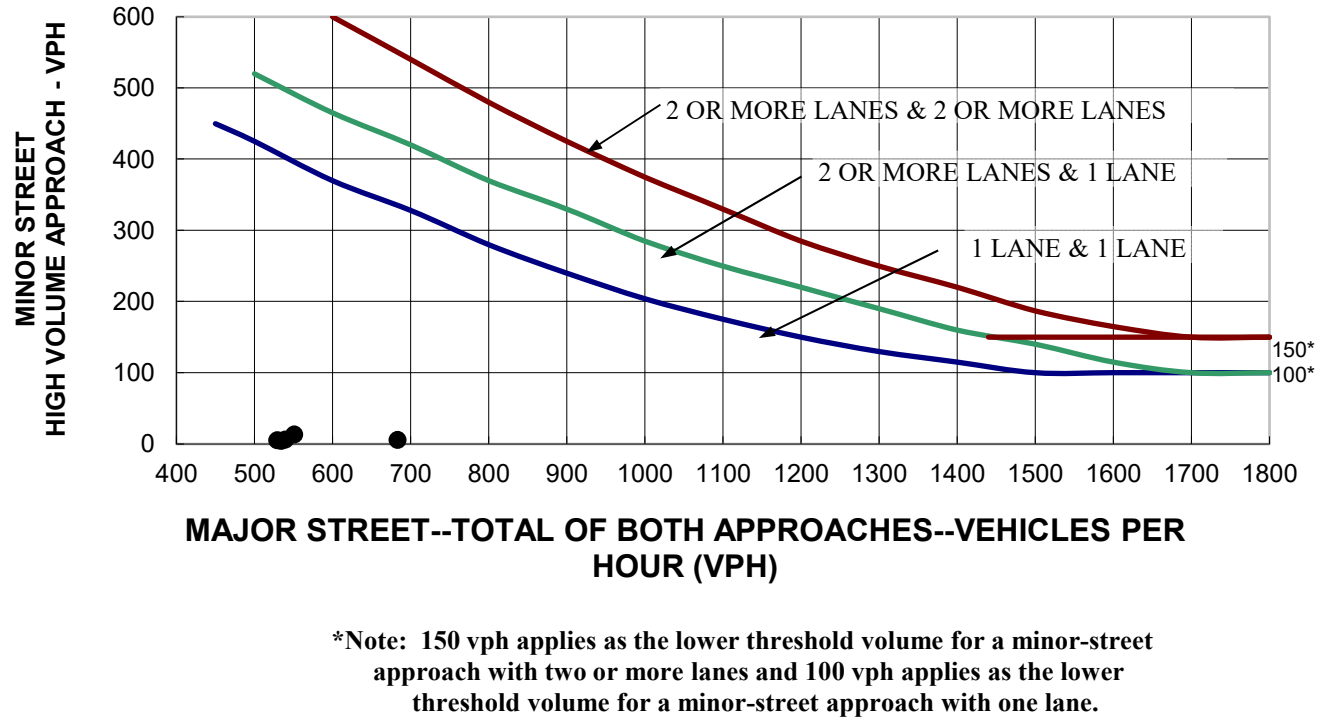


Figure 2. Peak hour volume warrant. (Warrant 3.)

Warrant 4. Four Hour Pedestrian Volume

☐ Yes ☒ No Meets each of 4 Highest Hours (Warrant 4 - see Figure 5 and Figure 6.)

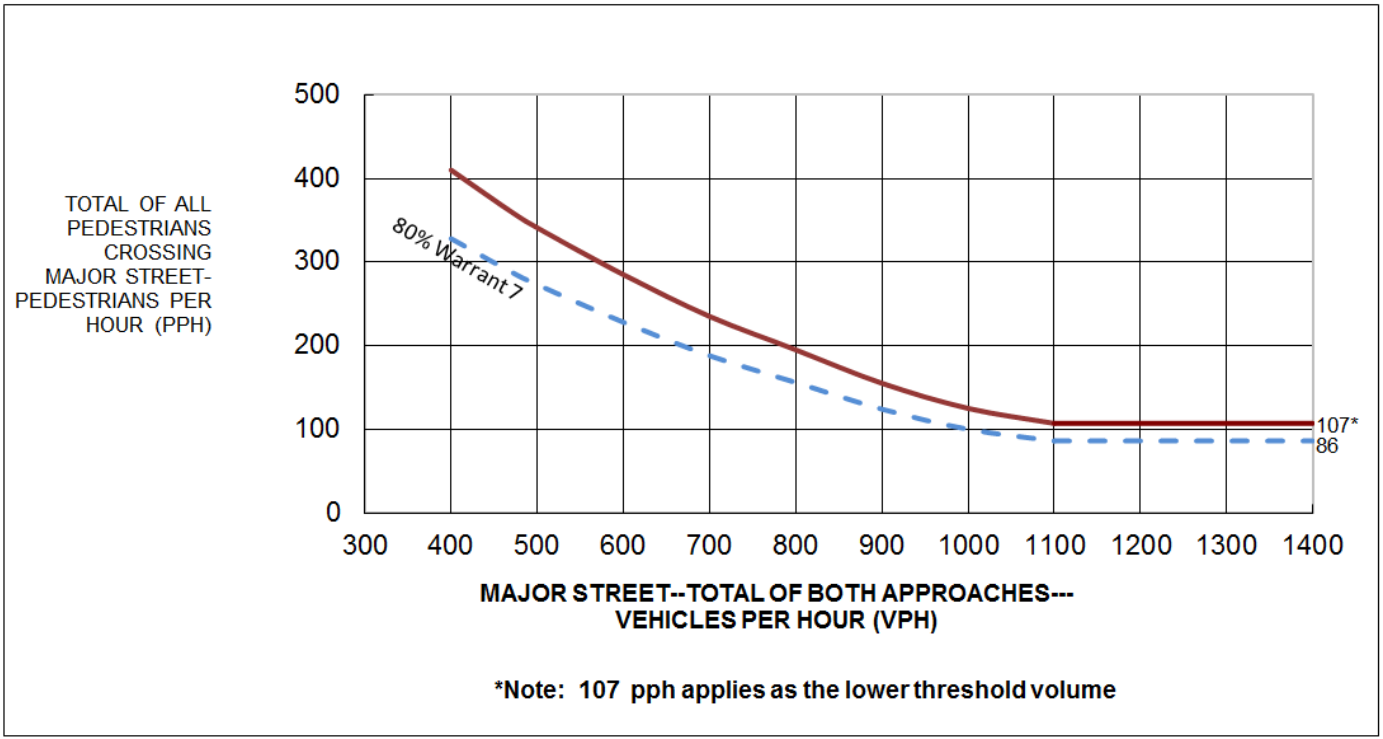


Figure 5. Four hour pedestrian warrant. (Warrant 4.)

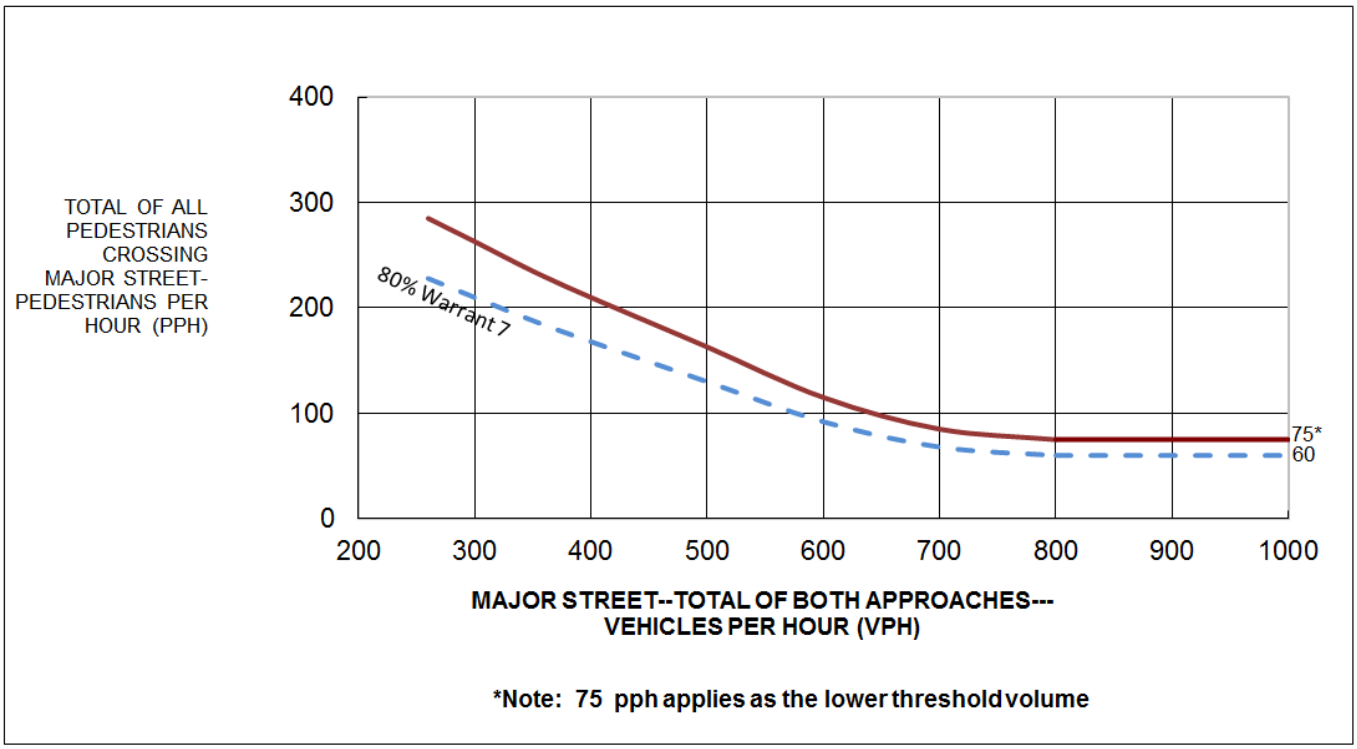


Figure 6. Four hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 35 MPH on major street). (Warrant 4.)

Warrant 4. Peak Hour Pedestrian Volumes

☐ Yes ☒ No Meets Peak Hour Pedestrian (Warrant 4 - see Figure 7 and Figure 8.)

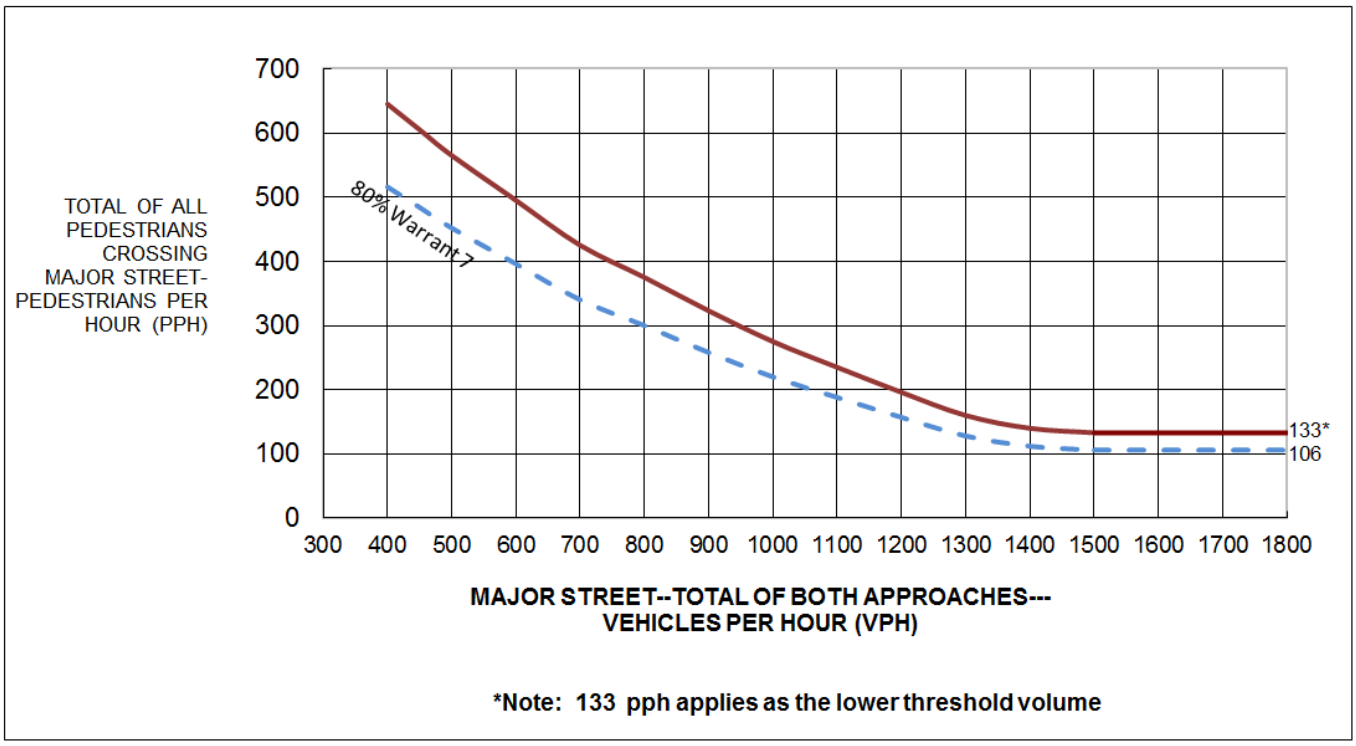


Figure 7. Four hour pedestrian warrant (Warrant 4.)

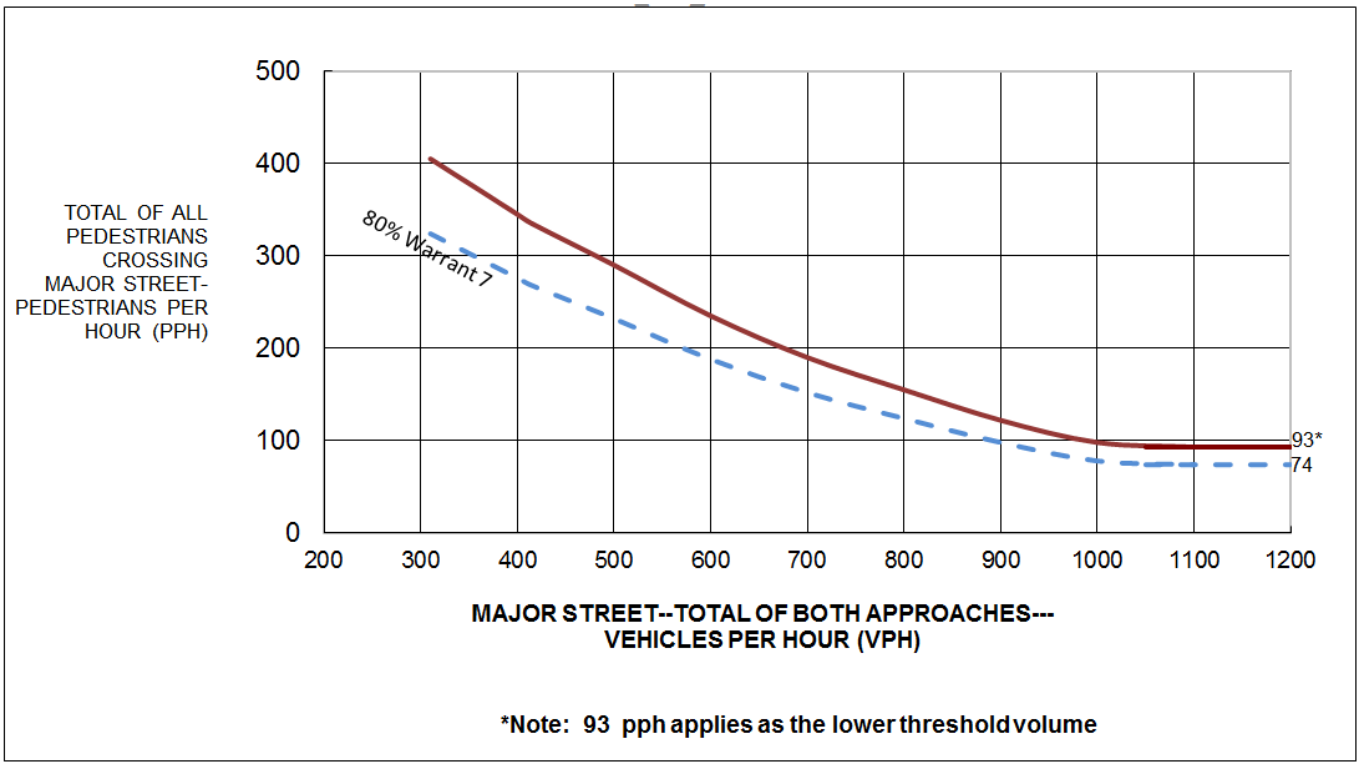


Figure 8. Peak hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 40 MPH on major street). (Warrant 4.)

Warrant 5. School Crossing

☐ Yes ☐ No	Is the number of adequate gaps in traffic stream during the period when the children are using the crossing less than the number of minutes in the same period?
NA	- ***and*** -
☐ Yes ☐ No	Are there a minimum of 20 students during the highest crossing hour?
	- ***and*** -
☐ Yes ☐ No	Is the nearest signal on the major street located more than 300 feet away? (This warrant may be applied if the proposed signal is less than 300 feet and does not restrict the progressive movement of traffic.)

Warrant 6. Coordinated Signal System

☐ Yes ☐ No	On a one-way street or a street with traffic predominantly in one direction, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur?
NA	- ***or*** -
☐ Yes ☐ No	On a two-way street, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur and would the proposed and adjacent traffic control signal provide a progressive operation?

Warrant 7. Crash Experience

☐ Yes ☒ No	Is one of the following conditions met?: ◆ 80% of Condition A or Condition B in Warrant 1 ◆ 56% of Conditions A or B in Warrant 1 (major-street speed exceeding 40 mph or population less than 10,000) ◆ 80% or more of Warrant 4
	- ***and*** -
☐ Yes ☒ No	Have there been 5 or more reported crashes susceptible to correction by a traffic signal in 12 months?

Warrant 8. Roadway Network

NA

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume on all approaches greater than 1000 vehicles for each of any 5 hours of a Saturday and/or Sunday.

- ***or*** -

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume greater than 1000 vehicles for the peak hour of a typical weekday, and do the 5 year projected traffic volumes meet one or more of Warrants 1, 2, and 3 during an average weekday?

Check applicable characteristics of each route (only 1 needs to be checked):

Major Street	Minor Street	
☐ Yes	☐ No	It is part of street or highway system that serves as the principal roadway network for through traffic flow.
☐ Yes	☐ No	It includes rural or suburban highways outside, entering, or traversing a city.
☐ Yes	☐ No	It appears as a major route on an official plan such as a major street plan in an urban area traffic and transportation study.
☐ Yes	☐ No	It connects areas of principal traffic generation.
☐ Yes	☐ No	It has surface street freeway or expressway ramp terminals.

Warrant 9. Intersection Near a Grade Crossing (One Approach Lane at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 9.)

NA

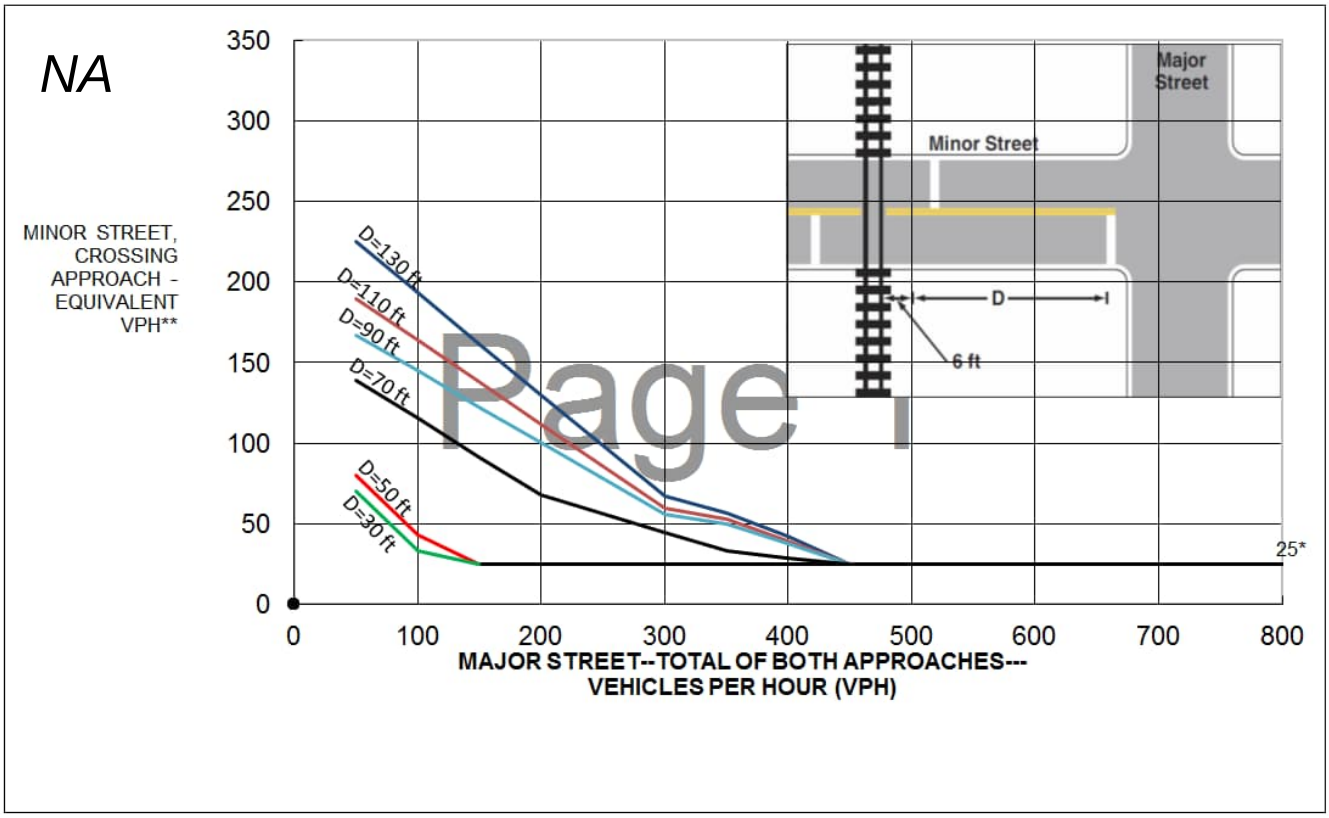


Figure 9. Railroad Grade Crossing (One Approach Lane at the Track Crossing) (Warrant 9.)

Warrant 9. Intersection Near a Grade Crossing (Two or More Approach Lanes at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 10.)

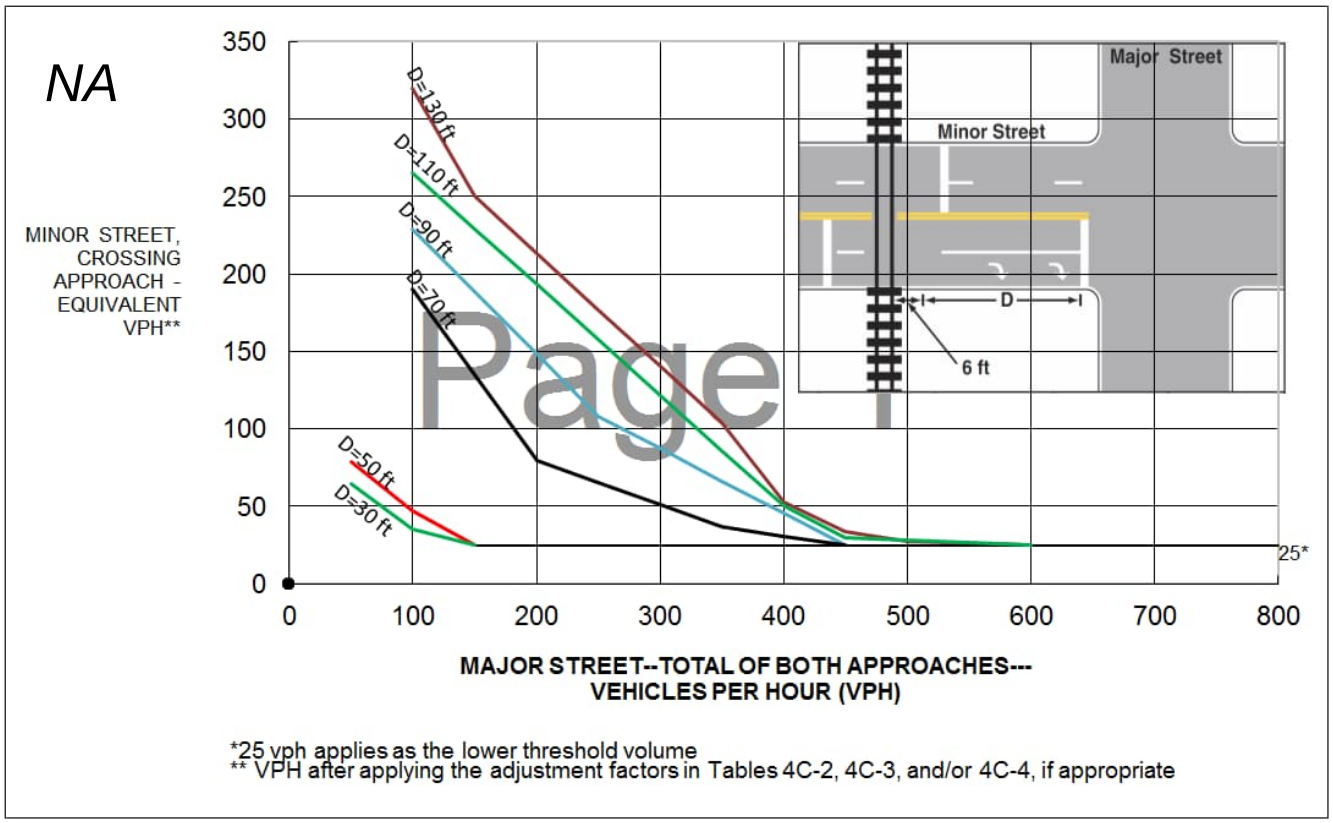


Figure 10. Railroad Grade Crossing (Two or More Approach Lanes at the Track Crossing) (Warrant 9.)

Table 4C-2. Warrant 9, Adjustment Factor for Daily Frequency of Rail Traffic

Rail Traffic per Day	Adjustment Factor
1	0.67
2	0.91
3 to 5	1.00
6 to 8	1.18
9 to 11	1.25
12 or more	1.33

Table 4C-3. Warrant 9, Adjustment Factor for Percentage of High-Occupancy Buses

% of High-Occupancy Buses* on Minor-Street Approach	Adjustment Factor
0%	1.00
2%	1.09
4%	1.19
6% or more	1.32

* A high-occupancy bus is defined as a bus occupied by at least 20 people.

Table 4C-4. Warrant 9, Adjustment Factor for Percentage of Tractor-Trailer Trucks

% of Tractor-Trailer Trucks on Minor-Street Approach	Adjustment Factor	
	D less than 70 feet	D of 70 feet or more
0% to 2.5%	0.50	0.50
2.6% to 7.5%	0.75	0.75
7.6% to 12.5%	1.00	1.00
12.6% to 17.5%	2.30	1.15
17.6% to 22.5%	2.70	1.35
22.6% to 27.5%	3.28	1.64
More than 27.5%	4.18	2.09

Remarks:

Traffic Survey — Count Analysis

Texas Department of Transportation

Form Revised 2/27/2012

2011 TMUTCD Warrants

County: Bexar District: San Angelo

City: San Antonio Population: 200,000 Survey Date: 7/18/2019

		Name	Control	Section	85% Speed
Major	0	Commerce			35 MPH
Minor	0	Picoso			30 MPH

Eight Highest Hours: Include the same 8 hours for the Major and Minor St. volumes.

Time Ends	Major St. - Both App.		Minor St. - Hi. Vol. App.	
	Veh. Total	Ped. Total	Veh. Total	Ped. Total
6:00 PM	1,208	3	13	
5:00 PM	1,106	3	8	
4:00 PM	960	0	6	
1:00 PM	867	0	4	
3:00 PM	849	0	5	
7:00 PM	811	0	7	
2:00 PM	808	0	5	
12 NOON	737	0	4	

Comments:

Based on 2019 traffic volumes and crash analyses, Signal not warranted at Commerce Street and Picoso Street intersection.

Warrant 1. Eight Hour Vehicular Volume

☑ Yes ☐ No Meets 70%[c] (and major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition A.

– or –

☑ Yes ☐ No Meets 70%[c] (and major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition B.

– or –

☑ Yes ☐ No Meets 80%[b] of Conditions A and B.

– or –

☐ Yes ☐ No Meets 56%[d] of Conditions A and B (and major-street speed exceeds 40 mph or population less than 10,000).

Condition A - Minimum Vehicle Volume

Number of Lanes		Vehicles per hour on Major St (Total of Both Approaches)					Vehicles per hour on higher-volume Minor St approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	122.9%	100%[a]	80%[b]	70%[c]	56%[d]	2.7%
1	1	500	400	350	280	0	150	120	105	84	0
2 or more	1	600	480	420	336	737	150	120	105	84	4
2 or more	2 or more	600	480	420	336	0	200	160	140	112	0
1	2 or more	500	400	350	280	0	200	160	140	112	0

Condition B - Interruption of Continuous Traffic

Number of Lanes		Vehicles per hour on Major St (Total of Both Approaches)					Vehicles per hour on higher-volume Minor St approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	81.9%	100%[a]	80%[b]	70%[c]	56%[d]	5.5%
1	1	750	600	525	420	0	75	60	53	42	0
2 or more	1	900	720	630	504	737	75	60	53	42	4
2 or more	2 or more	900	720	630	504	0	100	80	70	56	0
1	2 or more	750	600	525	420	0	100	80	70	56	0

[a]Basic minimum hourly volume.

[b]Used for combination of Conditions A and B after adequate trial of other remedial measures.

[c]May be used when the major-street speed exceeds 40 mph or in a community with a population of less than 10,000.

[d]May be used for combination of Conditions A and B after adequat trial of other remedial measures when major street exceeds 40 mph or in an isolated community with a population of less than 10,000.

Warrant 2. Four Hour Volumes

☐ Yes ☑ No	Meets each of 4 Highest Hours (Warrant 2 — see Figure 1).

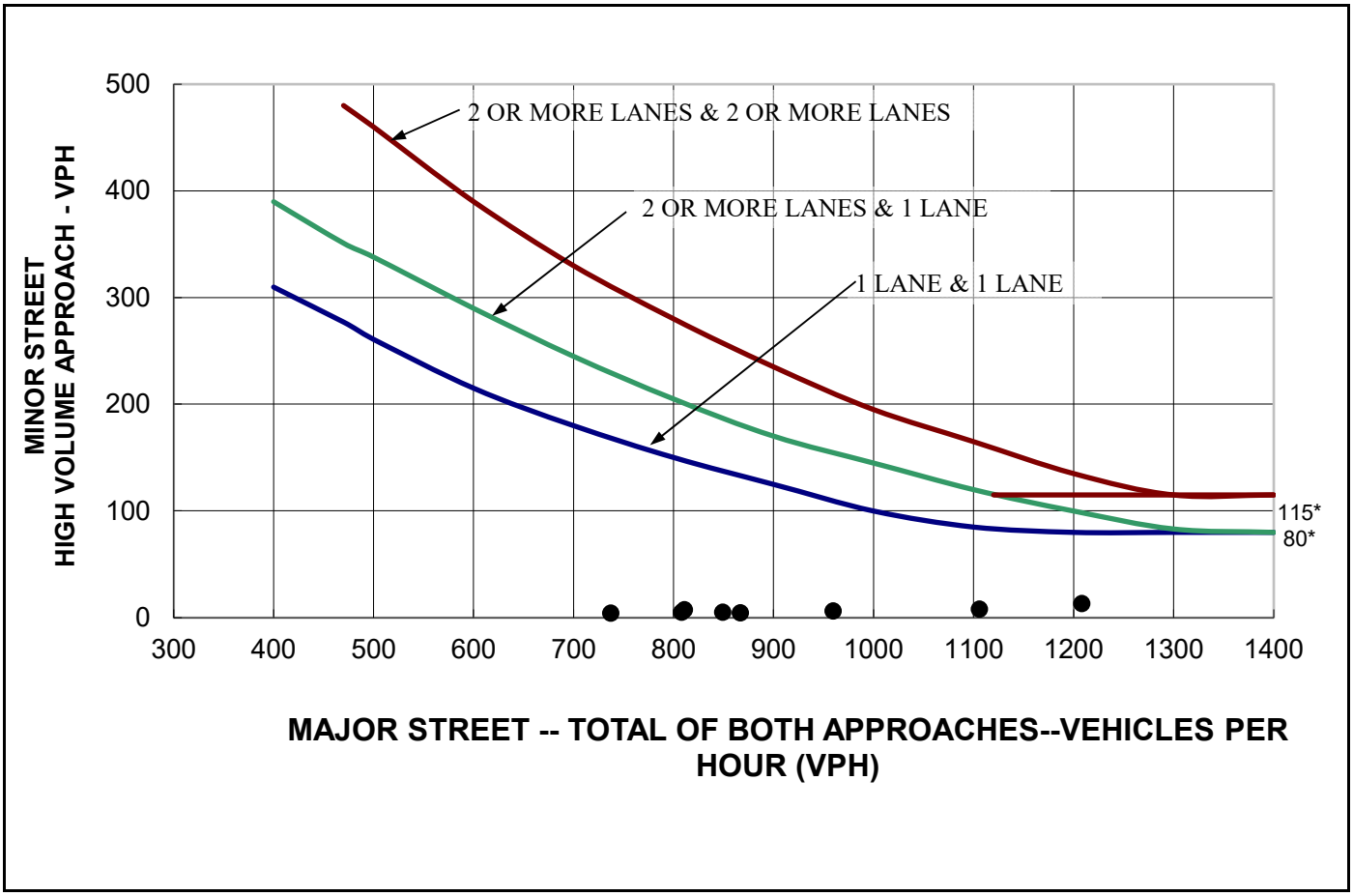
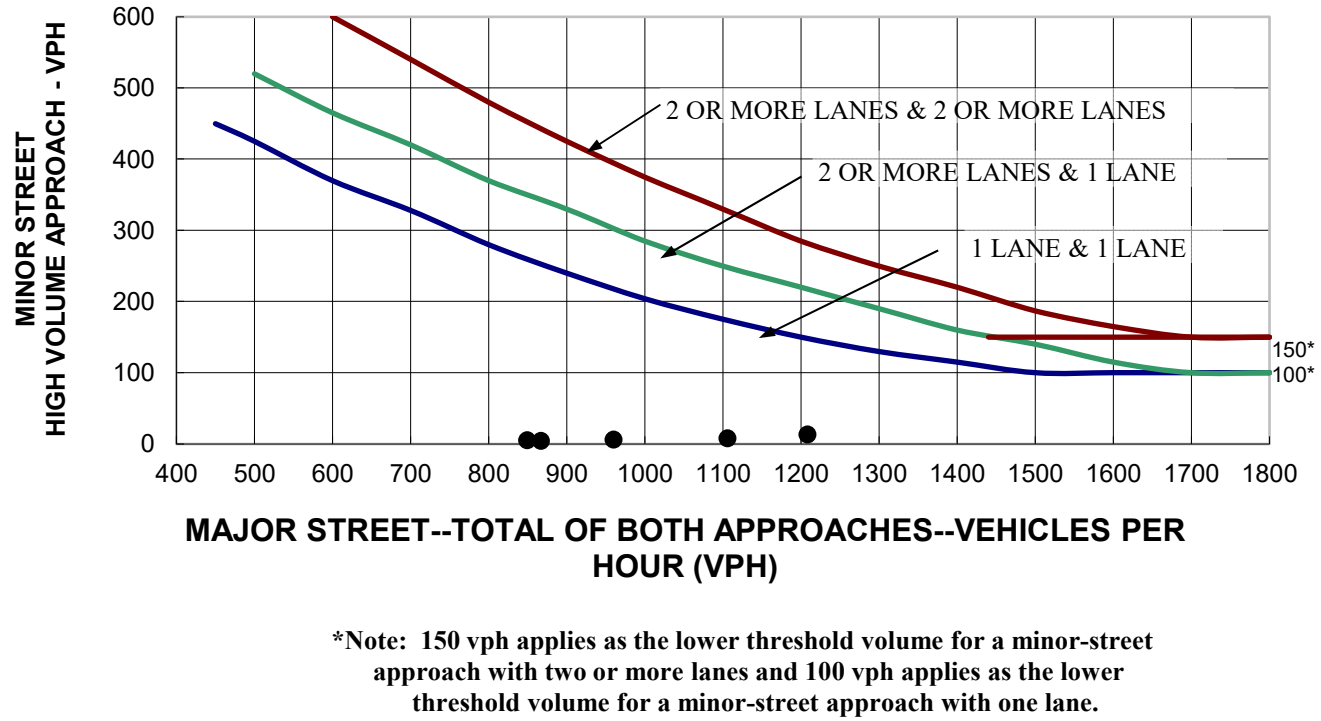


Figure 1. Four-hour volume warrant. (Warrant 2.)

Warrant 3. Peak Hour

☐ Yes ☑ No	Are all of the following conditions true for any four consecutive 15 minute periods? 1. The total stopped time delay experienced by the traffic on one minor street approach (one direction only) controlled by a stop sign equals or exceeds 4 vehicle-hours for a one-lane approach and 5 vehicle-hours for a two-lane approach, *and* 2. The volume of the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes, *and* 3. The total entering volume serviced during the hour equals or exceeds 650 vph for intersections with three approaches or 800 vph for intersections with four (or more) approaches.
	– or –
☐ Yes ☑ No	Meets one High Hour (Warrant 3 — see Figure 2).



***Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.**

Figure 2. Peak hour volume warrant. (Warrant 3.)

Warrant 4. Four Hour Pedestrian Volume

☐ Yes ☒ No Meets each of 4 Highest Hours (Warrant 4 - see Figure 5 and Figure 6.)

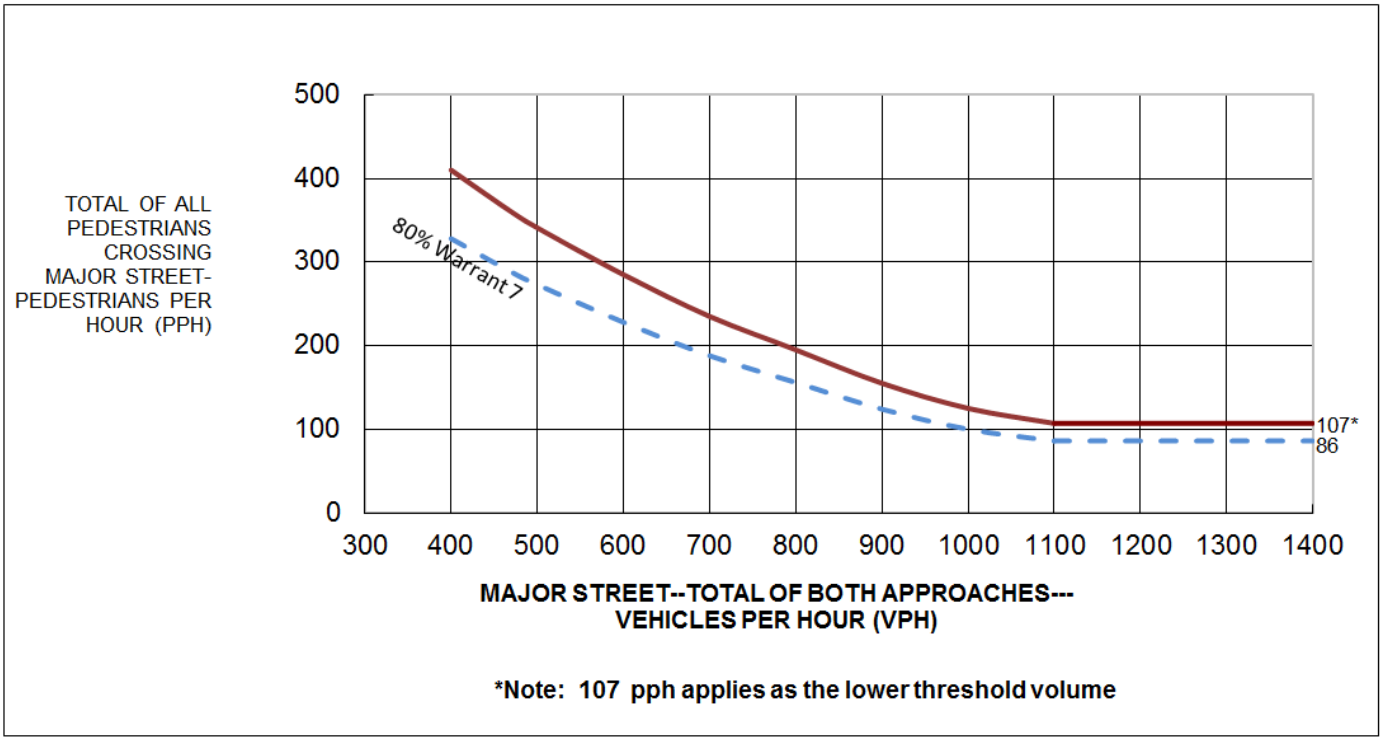


Figure 5. Four hour pedestrian warrant. (Warrant 4.)

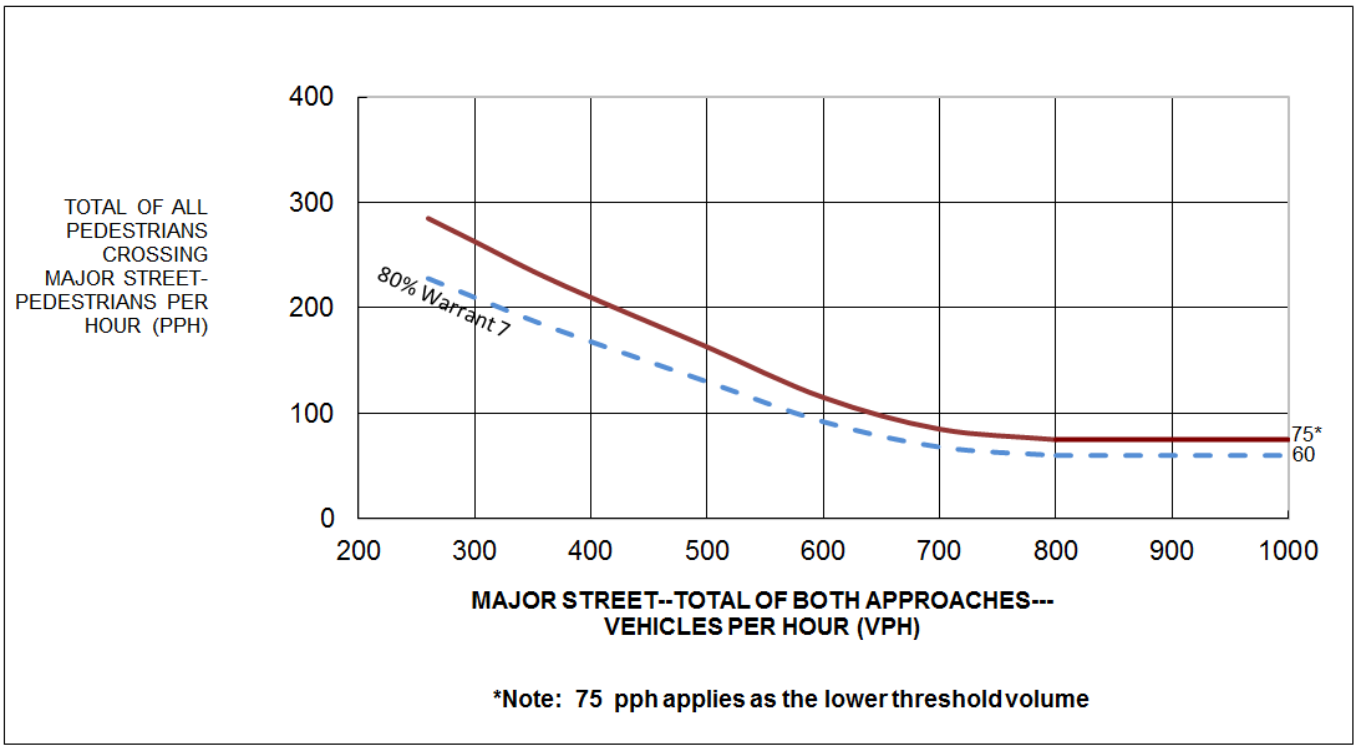


Figure 6. Four hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 35 MPH on major street). (Warrant 4.)

Warrant 4. Peak Hour Pedestrian Volumes

☐ Yes ☒ No Meets Peak Hour Pedestrian (Warrant 4 - see Figure 7 and Figure 8.)

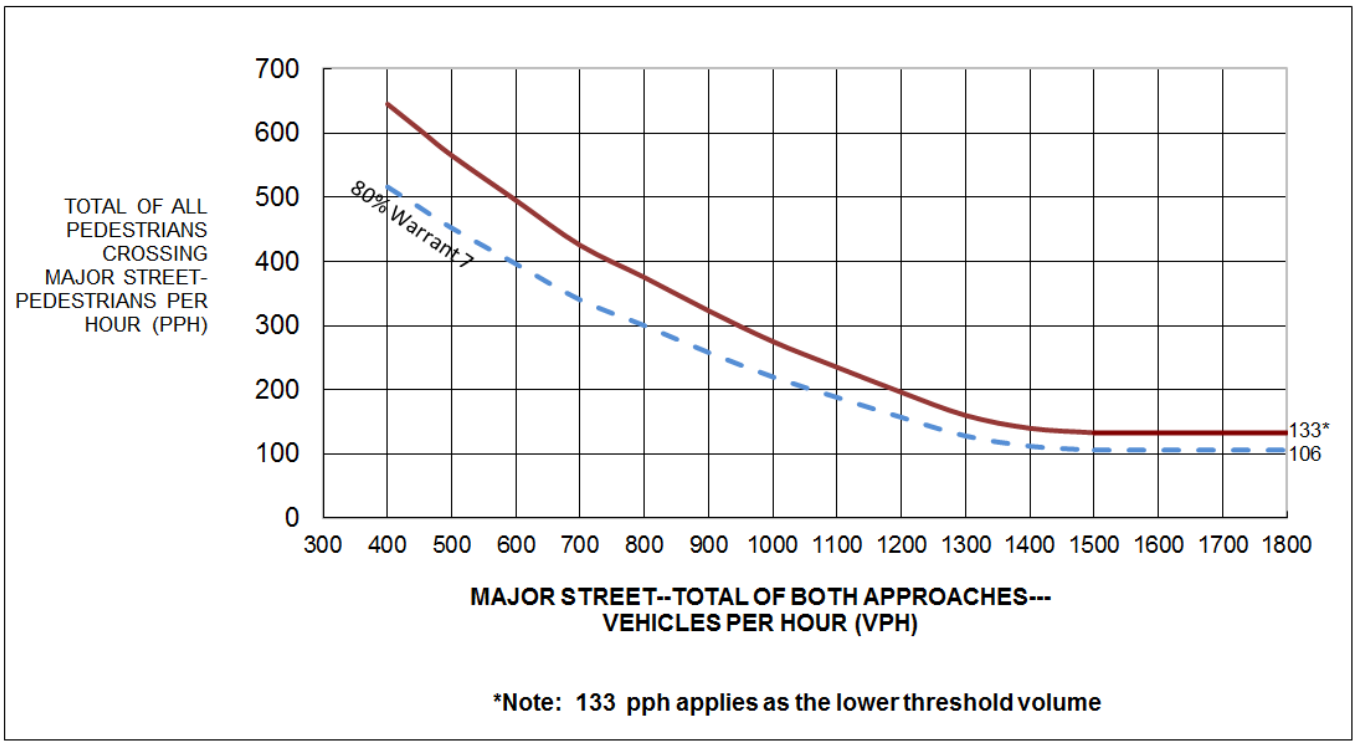


Figure 7. Four hour pedestrian warrant (Warrant 4.)

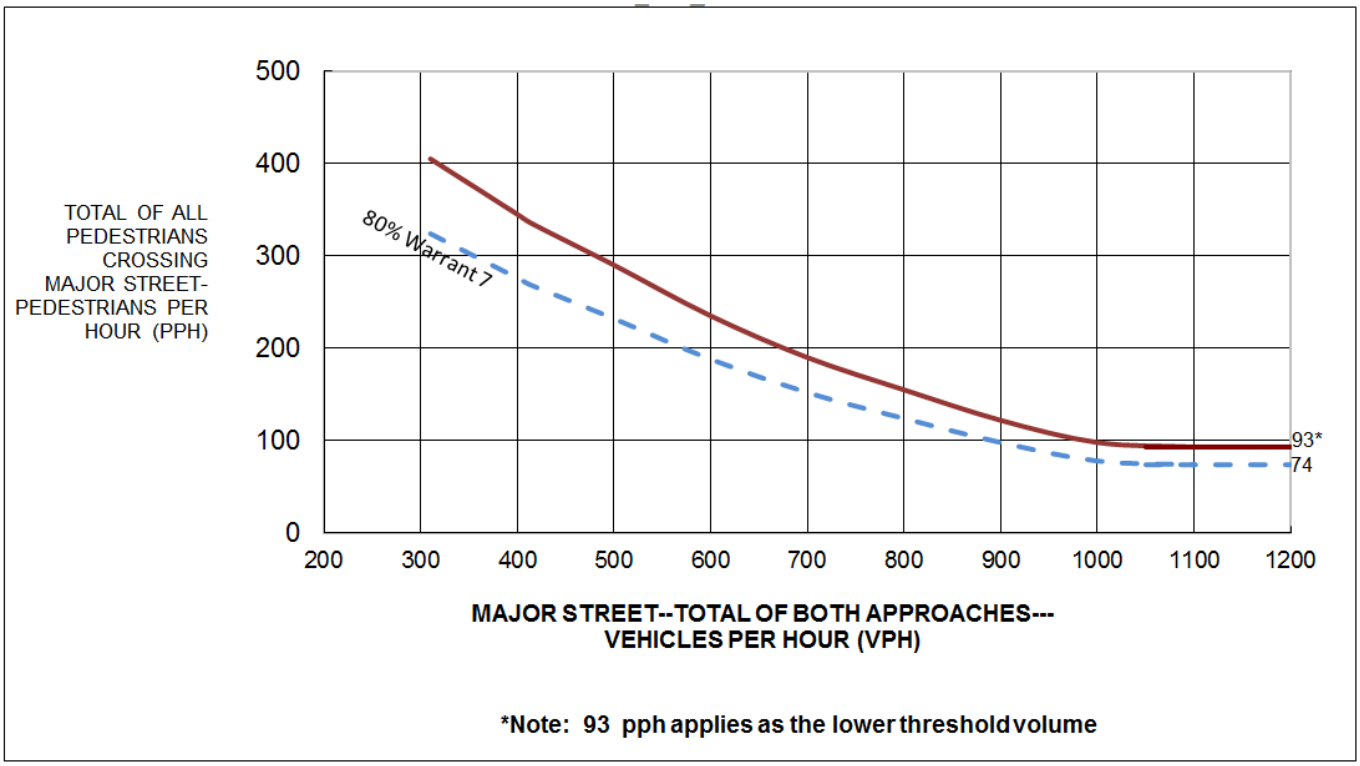


Figure 8. Peak hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 40 MPH on major street). (Warrant 4.)

Warrant 5. School Crossing

☐ Yes ☐ No	Is the number of adequate gaps in traffic stream during the period when the children are using the crossing less than the number of minutes in the same period?
NA	- ***and*** -
☐ Yes ☐ No	Are there a minimum of 20 students during the highest crossing hour?
	- ***and*** -
☐ Yes ☐ No	Is the nearest signal on the major street located more than 300 feet away? (This warrant may be applied if the proposed signal is less than 300 feet and does not restrict the progressive movement of traffic.)

Warrant 6. Coordinated Signal System

☐ Yes ☐ No	On a one-way street or a street with traffic predominantly in one direction, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur?
NA	- ***or*** -
☐ Yes ☐ No	On a two-way street, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur and would the proposed and adjacent traffic control signal provide a progressive operation?

Warrant 7. Crash Experience

☐ Yes ☒ No	Is one of the following conditions met?: ◆ 80% of Condition A or Condition B in Warrant 1 ◆ 56% of Conditions A or B in Warrant 1 (major-street speed exceeding 40 mph or population less than 10,000) ◆ 80% or more of Warrant 4
	- ***and*** -
☐ Yes ☒ No	Have there been 5 or more reported crashes susceptible to correction by a traffic signal in 12 months?

Warrant 8. Roadway Network

NA

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume on all approaches greater than 1000 vehicles for each of any 5 hours of a Saturday and/or Sunday.

- ***or*** -

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume greater than 1000 vehicles for the peak hour of a typical weekday, and do the 5 year projected traffic volumes meet one or more of Warrants 1, 2, and 3 during an average weekday?

Check applicable characteristics of each route (only 1 needs to be checked):

Major Street	Minor Street	
☐ Yes	☐ No	It is part of street or highway system that serves as the principal roadway network for through traffic flow.
☐ Yes	☐ No	It includes rural or suburban highways outside, entering, or traversing a city.
☐ Yes	☐ No	It appears as a major route on an official plan such as a major street plan in an urban area traffic and transportation study.
☐ Yes	☐ No	It connects areas of principal traffic generation.
☐ Yes	☐ No	It has surface street freeway or expressway ramp terminals.

Warrant 9. Intersection Near a Grade Crossing (One Approach Lane at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 9.)

NA

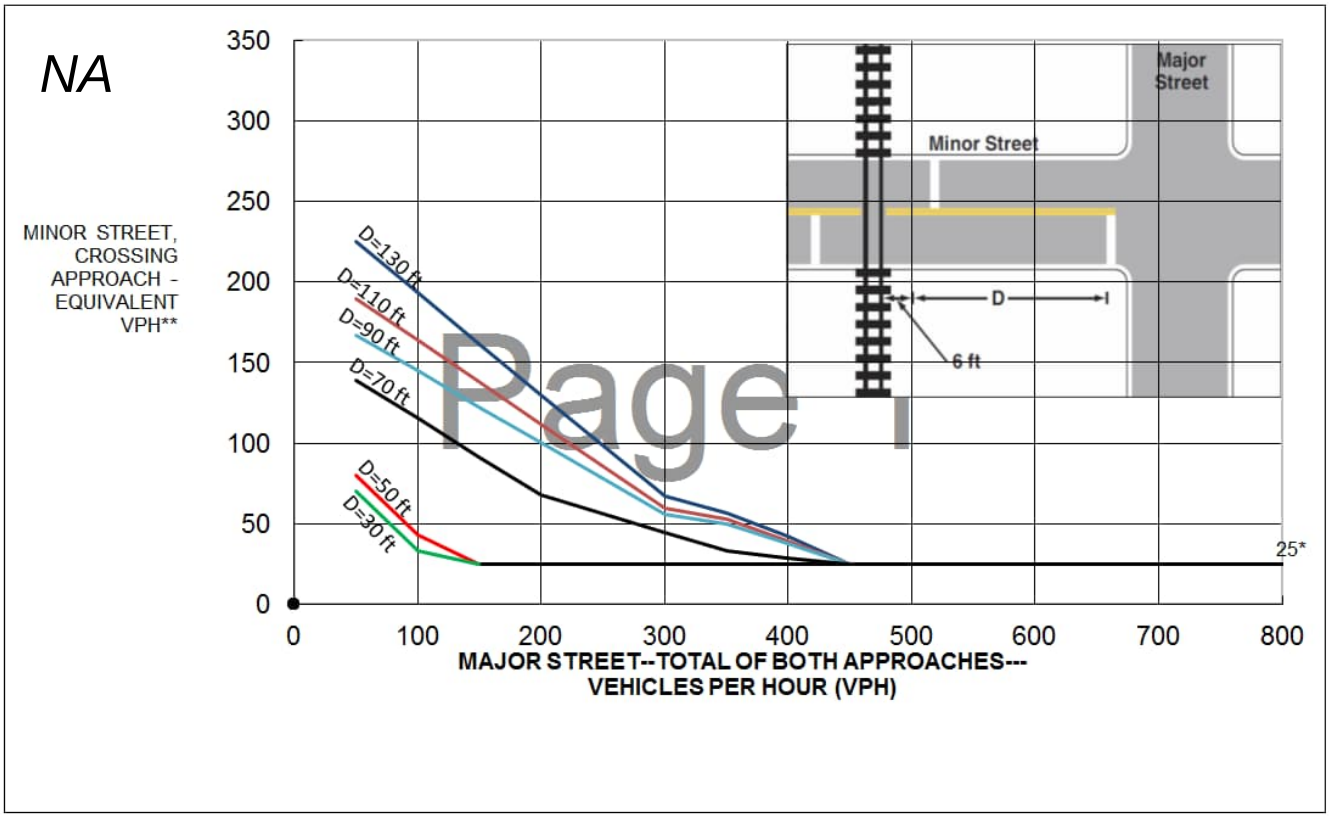


Figure 9. Railroad Grade Crossing (One Approach Lane at the Track Crossing) (Warrant 9.)

Warrant 9. Intersection Near a Grade Crossing (Two or More Approach Lanes at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 10.)

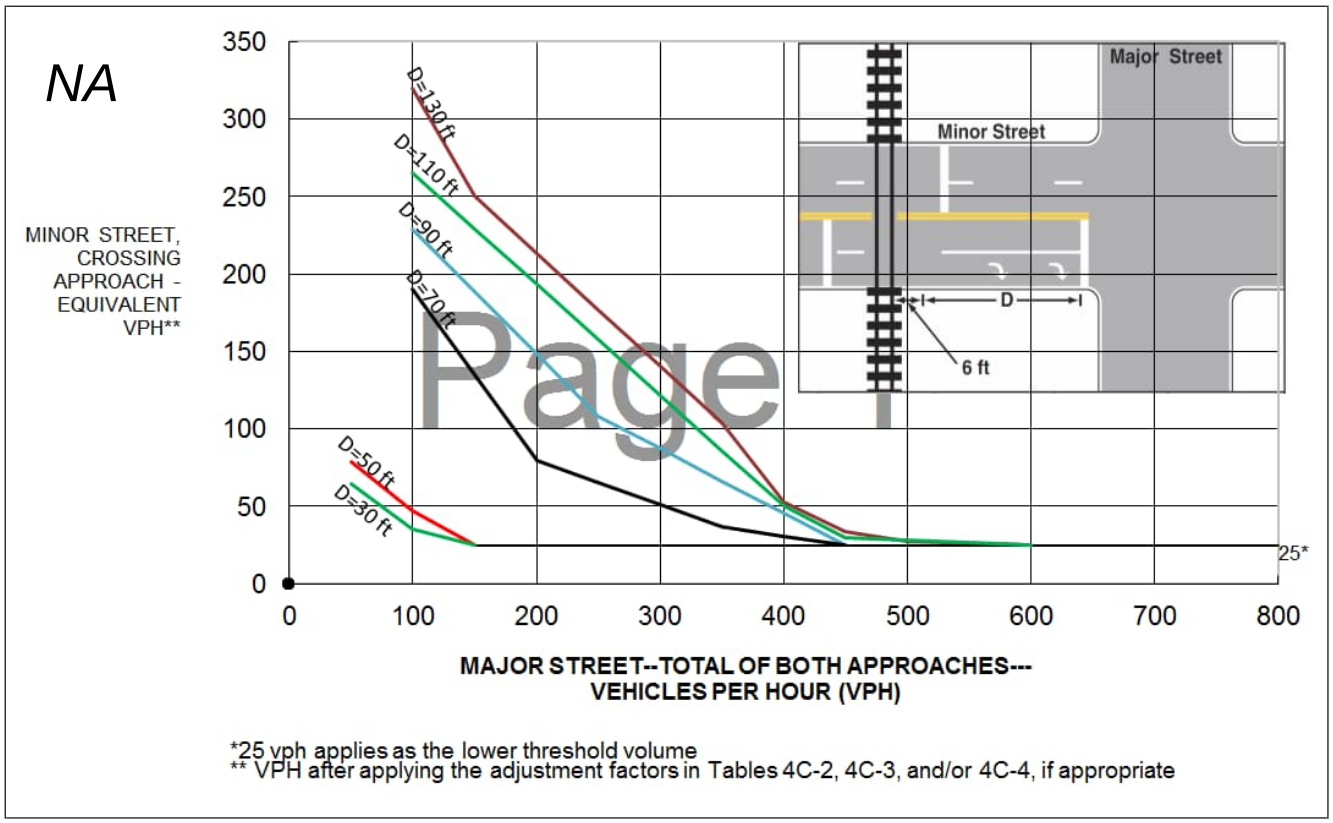


Figure 10. Railroad Grade Crossing (Two or More Approach Lanes at the Track Crossing) (Warrant 9.)

Table 4C-2. Warrant 9, Adjustment Factor for Daily Frequency of Rail Traffic

Rail Traffic per Day	Adjustment Factor
1	0.67
2	0.91
3 to 5	1.00
6 to 8	1.18
9 to 11	1.25
12 or more	1.33

Table 4C-3. Warrant 9, Adjustment Factor for Percentage of High-Occupancy Buses

% of High-Occupancy Buses* on Minor-Street Approach	Adjustment Factor
0%	1.00
2%	1.09
4%	1.19
6% or more	1.32

* A high-occupancy bus is defined as a bus occupied by at least 20 people.

Table 4C-4. Warrant 9, Adjustment Factor for Percentage of Tractor-Trailer Trucks

% of Tractor-Trailer Trucks on Minor-Street Approach	Adjustment Factor	
	D less than 70 feet	D of 70 feet or more
0% to 2.5%	0.50	0.50
2.6% to 7.5%	0.75	0.75
7.6% to 12.5%	1.00	1.00
12.6% to 17.5%	2.30	1.15
17.6% to 22.5%	2.70	1.35
22.6% to 27.5%	3.28	1.64
More than 27.5%	4.18	2.09

Remarks:

Traffic Survey — Count Analysis

Texas Department of Transportation

Form Revised 2/27/2012

2011 TMUTCD Warrants

County: Bexar District: San Angelo

City: San Antonio Population: 200,000 Survey Date: 7/18/2029

		Name	Control	Section	85% Speed
Major	0	Buena Vista			35 MPH
Minor	0	Picoso			30 MPH

Eight Highest Hours: Include the same 8 hours for the Major and Minor St. volumes.

Time Ends	Major St. - Both App.		Minor St. - Hi. Vol. App.	
	Veh. Total	Ped. Total	Veh. Total	Ped. Total
8:00 AM	778	0	6	
6:00 PM	616	3	15	
4:00 PM	604	0	7	
1:00 PM	602	0	5	
2:00 PM	595	0	6	
5:00 PM	578	3	11	
9:00 AM	580	0	7	
3:00 PM	541	0	6	

Comments:

Based on 2029 projected traffic volumes and crash analyses, Signal not warranted at Buena Vista and Picoso Street intersection.

Warrant 1. Eight Hour Vehicular Volume

☐ Yes ☑ No Meets 70%[c] (and major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition A.

– or –

☐ Yes ☑ No Meets 70%[c] (and major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition B.

– or –

☐ Yes ☑ No Meets 80%[b] of Conditions A and B.

– or –

☐ Yes ☑ No Meets 56%[d] of Conditions A and B (and major-street speed exceeds 40 mph or population less than 10,000).

Condition A - Minimum Vehicle Volume

Number of Lanes		Vehicles per hour on Major St (Total of Both Approaches)					Vehicles per hour on higher-volume Minor St approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	90.2%	100%[a]	80%[b]	70%[c]	56%[d]	3.9%
1	1	500	400	350	280	0	150	120	105	84	0
2 or more	1	600	480	420	336	541	150	120	105	84	6
2 or more	2 or more	600	480	420	336	0	200	160	140	112	0
1	2 or more	500	400	350	280	0	200	160	140	112	0

Condition B - Interruption of Continuous Traffic

Number of Lanes		Vehicles per hour on Major St (Total of Both Approaches)					Vehicles per hour on higher-volume Minor St approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	60.1%	100%[a]	80%[b]	70%[c]	56%[d]	7.8%
1	1	750	600	525	420	0	75	60	53	42	0
2 or more	1	900	720	630	504	541	75	60	53	42	6
2 or more	2 or more	900	720	630	504	0	100	80	70	56	0
1	2 or more	750	600	525	420	0	100	80	70	56	0

[a]Basic minimum hourly volume.

[b]Used for combination of Conditions A and B after adequate trial of other remedial measures.

[c]May be used when the major-street speed exceeds 40 mph or in a community with a population of less than 10,000.

[d]May be used for combination of Conditions A and B after adequat trial of other remedial measures when major street exceeds 40 mph or in an isolated community with a population of less than 10,000.

Warrant 2. Four Hour Volumes

☐ Yes ☑ No	Meets each of 4 Highest Hours (Warrant 2 — see Figure 1).

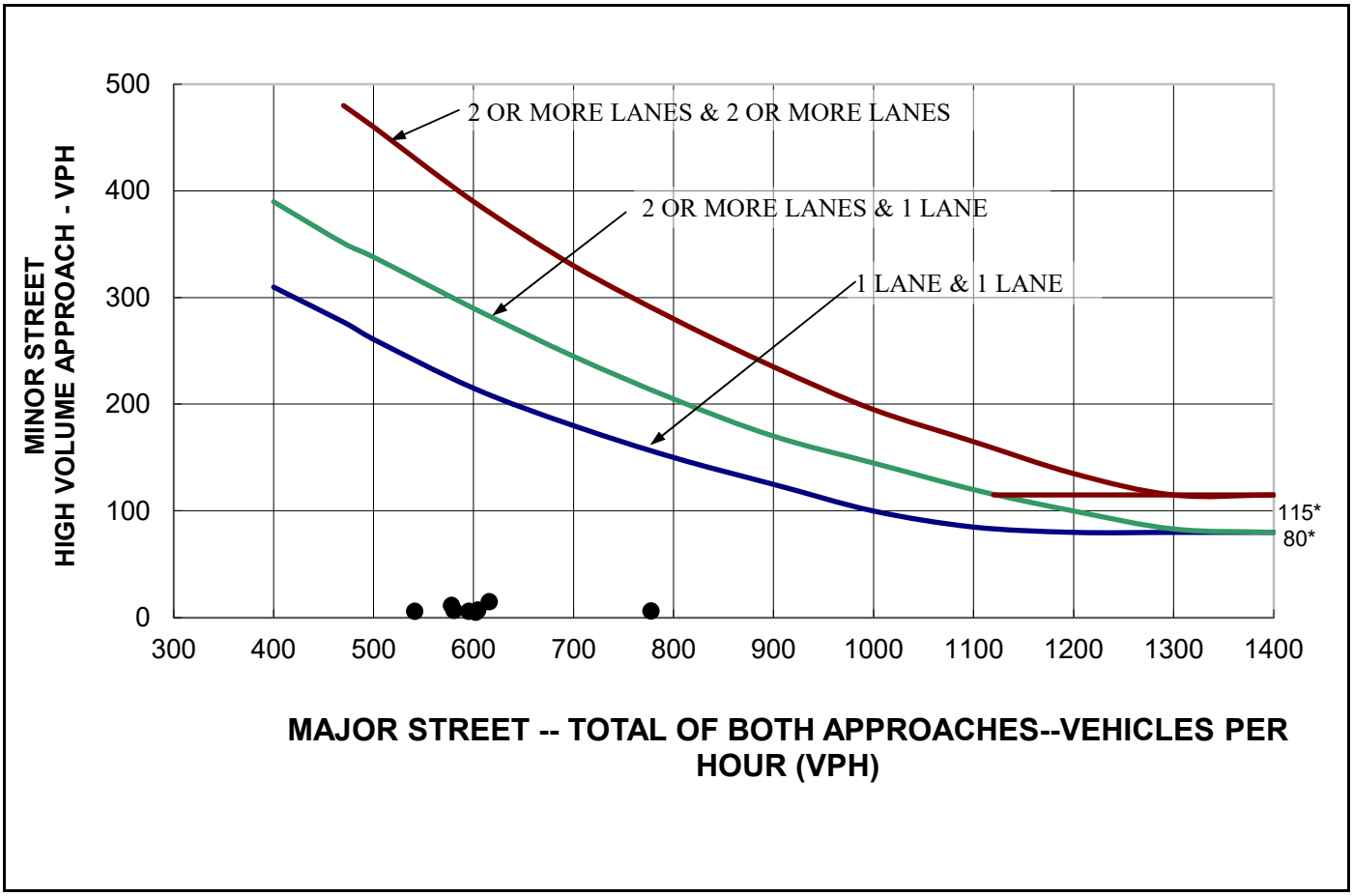
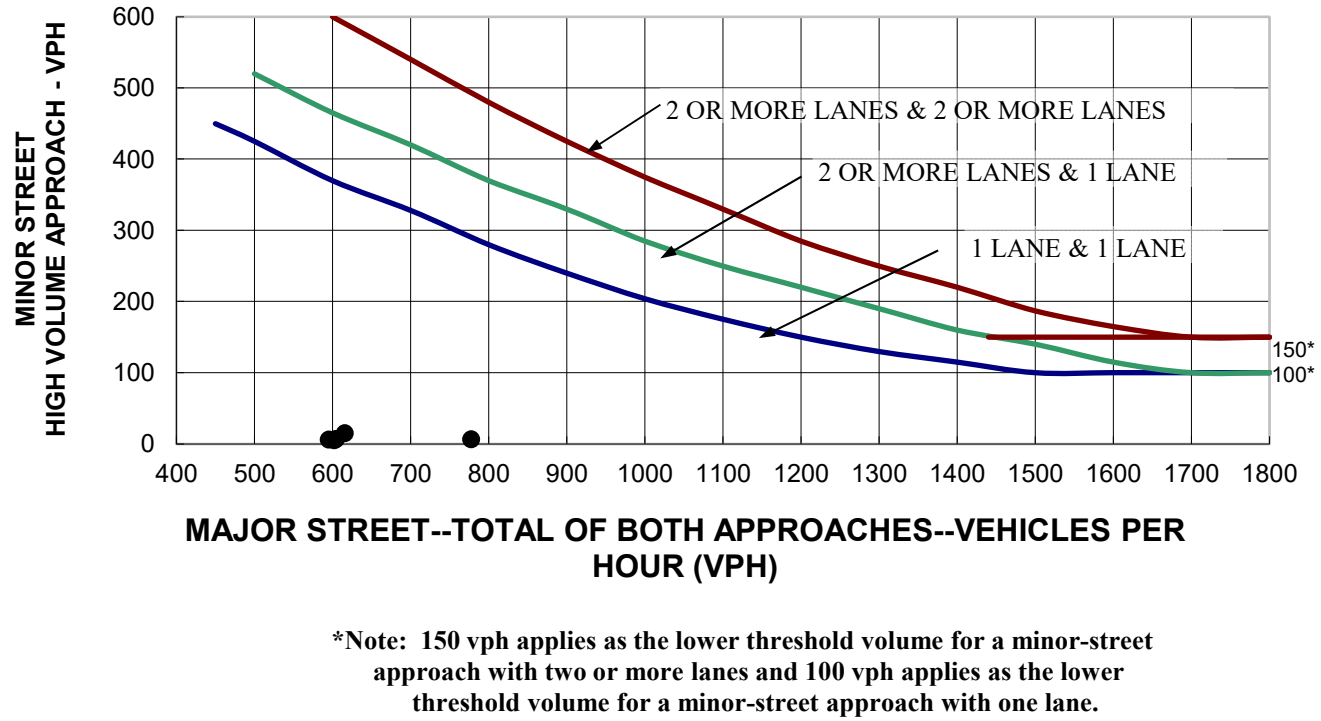


Figure 1. Four-hour volume warrant. (Warrant 2.)

Warrant 3. Peak Hour

☐ Yes ☑ No	Are all of the following conditions true for any four consecutive 15 minute periods? 1. The total stopped time delay experienced by the traffic on one minor street approach (one direction only) controlled by a stop sign equals or exceeds 4 vehicle-hours for a one-lane approach and 5 vehicle-hours for a two-lane approach, *and* 2. The volume of the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes, *and* 3. The total entering volume serviced during the hour equals or exceeds 650 vph for intersections with three approaches or 800 vph for intersections with four (or more) approaches.
	– or –
☐ Yes ☑ No	Meets one High Hour (Warrant 3 — see Figure 2).



***Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.**

Figure 2. Peak hour volume warrant. (Warrant 3.)

Warrant 4. Four Hour Pedestrian Volume

☐ Yes ☒ No Meets each of 4 Highest Hours (Warrant 4 - see Figure 5 and Figure 6.)

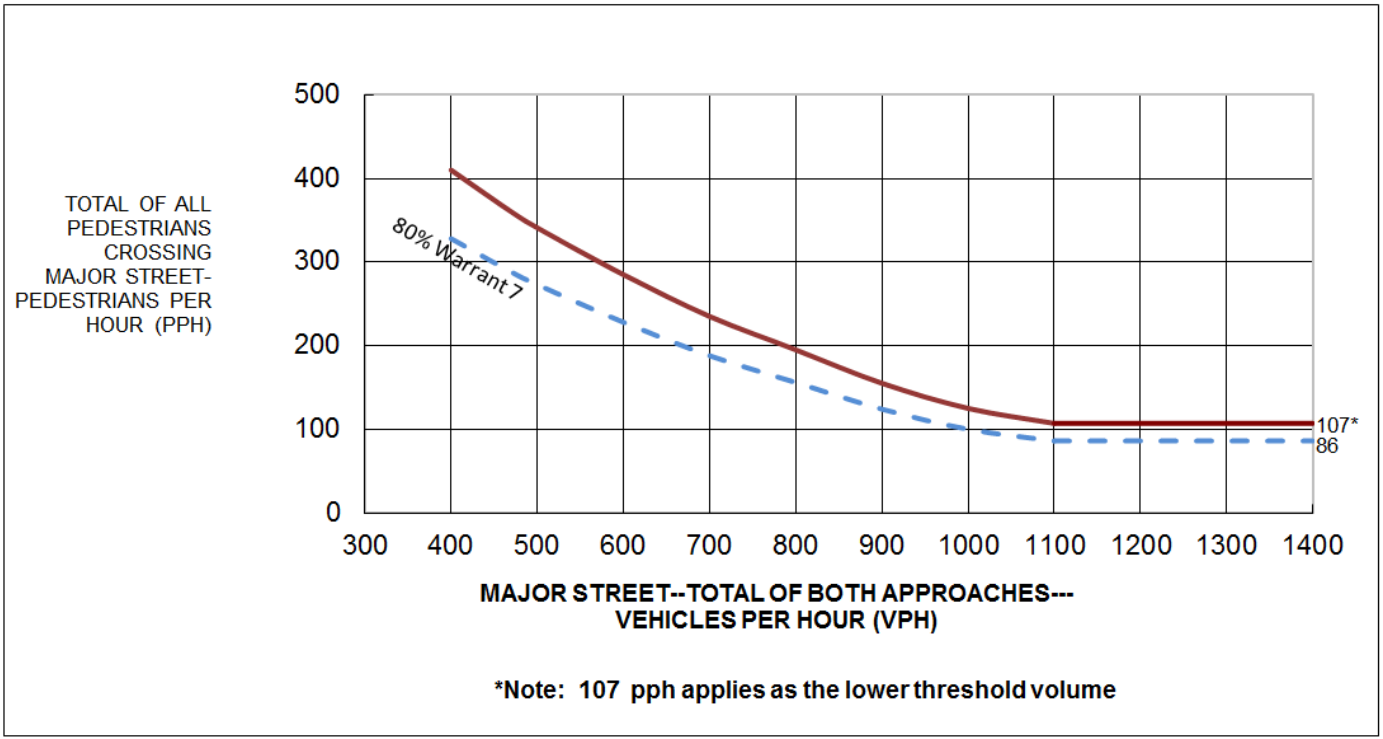


Figure 5. Four hour pedestrian warrant. (Warrant 4.)

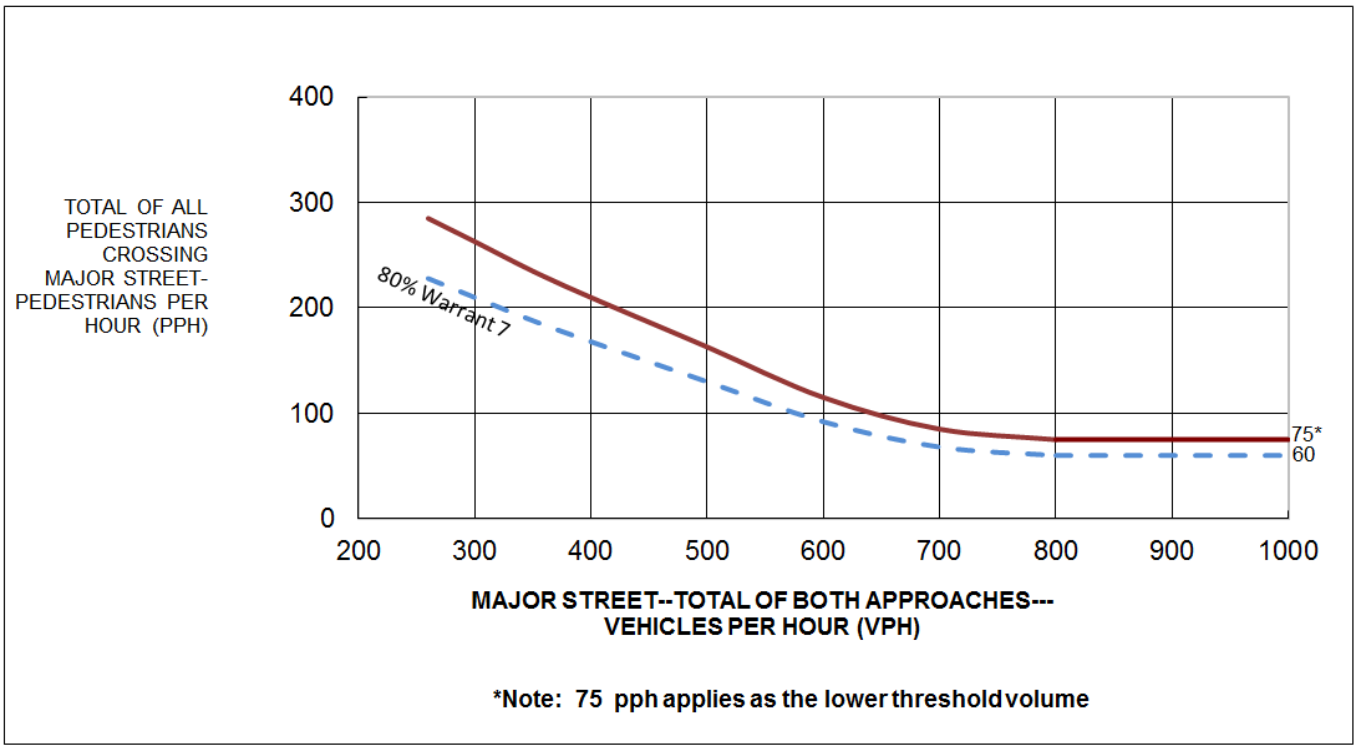


Figure 6. Four hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 35 MPH on major street). (Warrant 4.)

Warrant 4. Peak Hour Pedestrian Volumes

☐ Yes ☒ No Meets Peak Hour Pedestrian (Warrant 4 - see Figure 7 and Figure 8.)

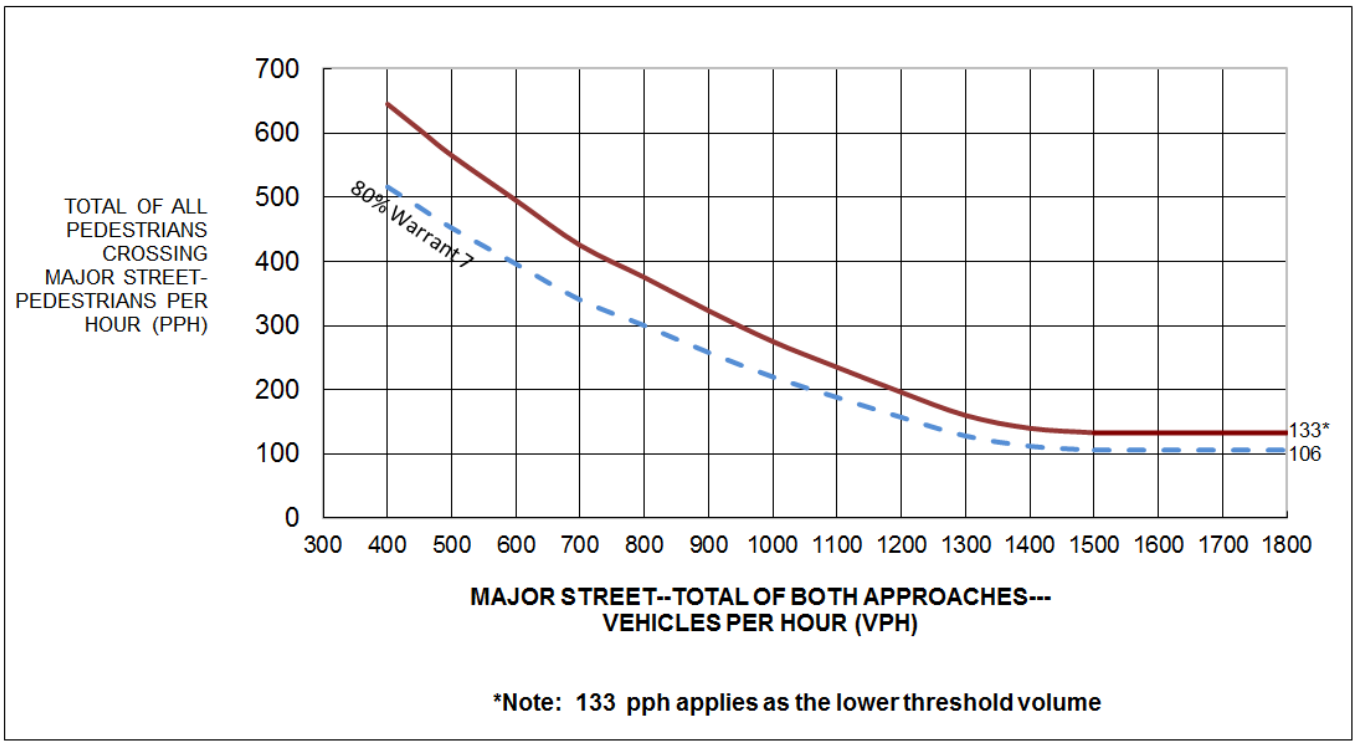


Figure 7. Four hour pedestrian warrant (Warrant 4.)

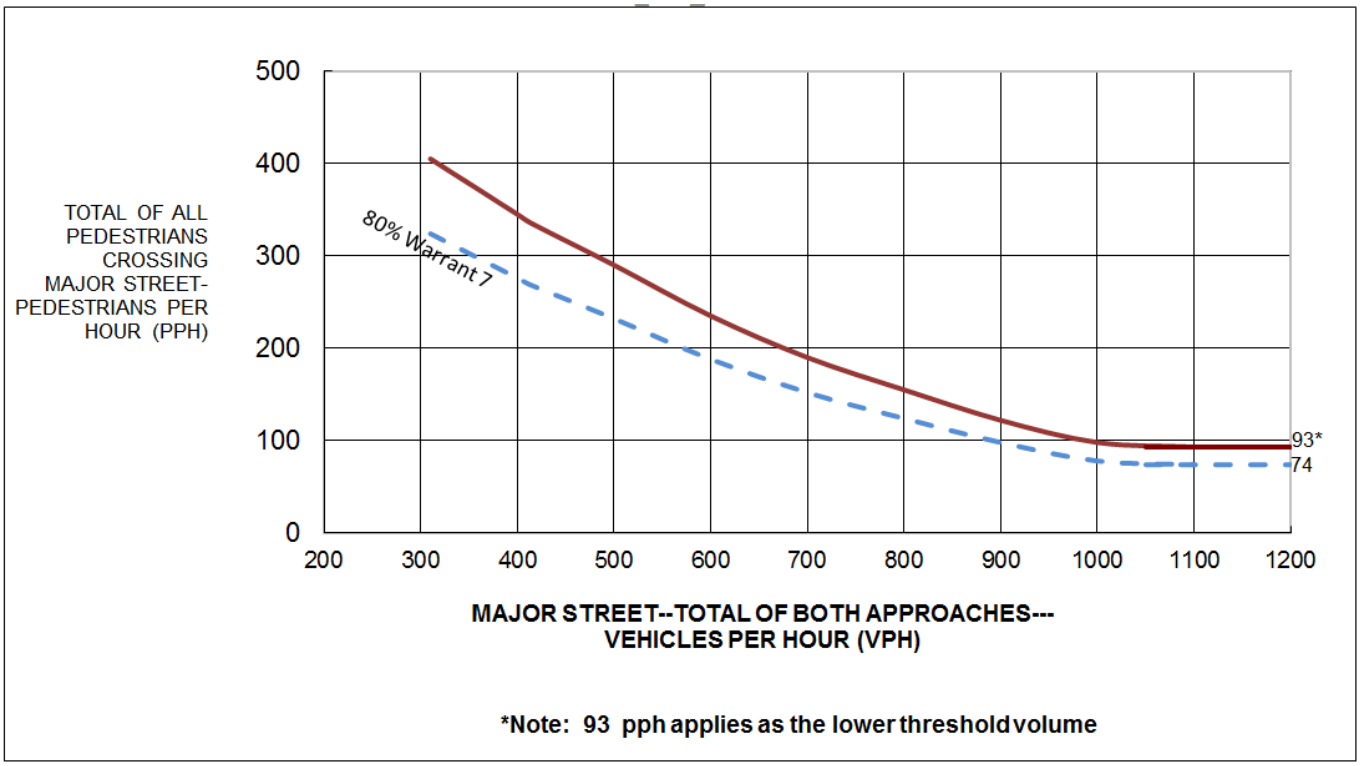


Figure 8. Peak hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 40 MPH on major street). (Warrant 4.)

Warrant 5. School Crossing

☐ Yes ☐ No	Is the number of adequate gaps in traffic stream during the period when the children are using the crossing less than the number of minutes in the same period?
NA	- ***and*** -
☐ Yes ☐ No	Are there a minimum of 20 students during the highest crossing hour?
	- ***and*** -
☐ Yes ☐ No	Is the nearest signal on the major street located more than 300 feet away? (This warrant may be applied if the proposed signal is less than 300 feet and does not restrict the progressive movement of traffic.)

Warrant 6. Coordinated Signal System

☐ Yes ☐ No	On a one-way street or a street with traffic predominantly in one direction, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur?
NA	- ***or*** -
☐ Yes ☐ No	On a two-way street, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur and would the proposed and adjacent traffic control signal provide a progressive operation?

Warrant 7. Crash Experience

☐ Yes ☒ No	Is one of the following conditions met?: ◆ 80% of Condition A or Condition B in Warrant 1 ◆ 56% of Conditions A or B in Warrant 1 (major-street speed exceeding 40 mph or population less than 10,000) ◆ 80% or more of Warrant 4
	- ***and*** -
☐ Yes ☒ No	Have there been 5 or more reported crashes susceptible to correction by a traffic signal in 12 months?

Warrant 8. Roadway Network

NA

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume on all approaches greater than 1000 vehicles for each of any 5 hours of a Saturday and/or Sunday.

- ***or*** -

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume greater than 1000 vehicles for the peak hour of a typical weekday, and do the 5 year projected traffic volumes meet one or more of Warrants 1, 2, and 3 during an average weekday?

Check applicable characteristics of each route (only 1 needs to be checked):

Major Street	Minor Street	
☐ Yes	☐ No	It is part of street or highway system that serves as the principal roadway network for through traffic flow.
☐ Yes	☐ No	It includes rural or suburban highways outside, entering, or traversing a city.
☐ Yes	☐ No	It appears as a major route on an official plan such as a major street plan in an urban area traffic and transportation study.
☐ Yes	☐ No	It connects areas of principal traffic generation.
☐ Yes	☐ No	It has surface street freeway or expressway ramp terminals.

Warrant 9. Intersection Near a Grade Crossing (One Approach Lane at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 9.)

NA

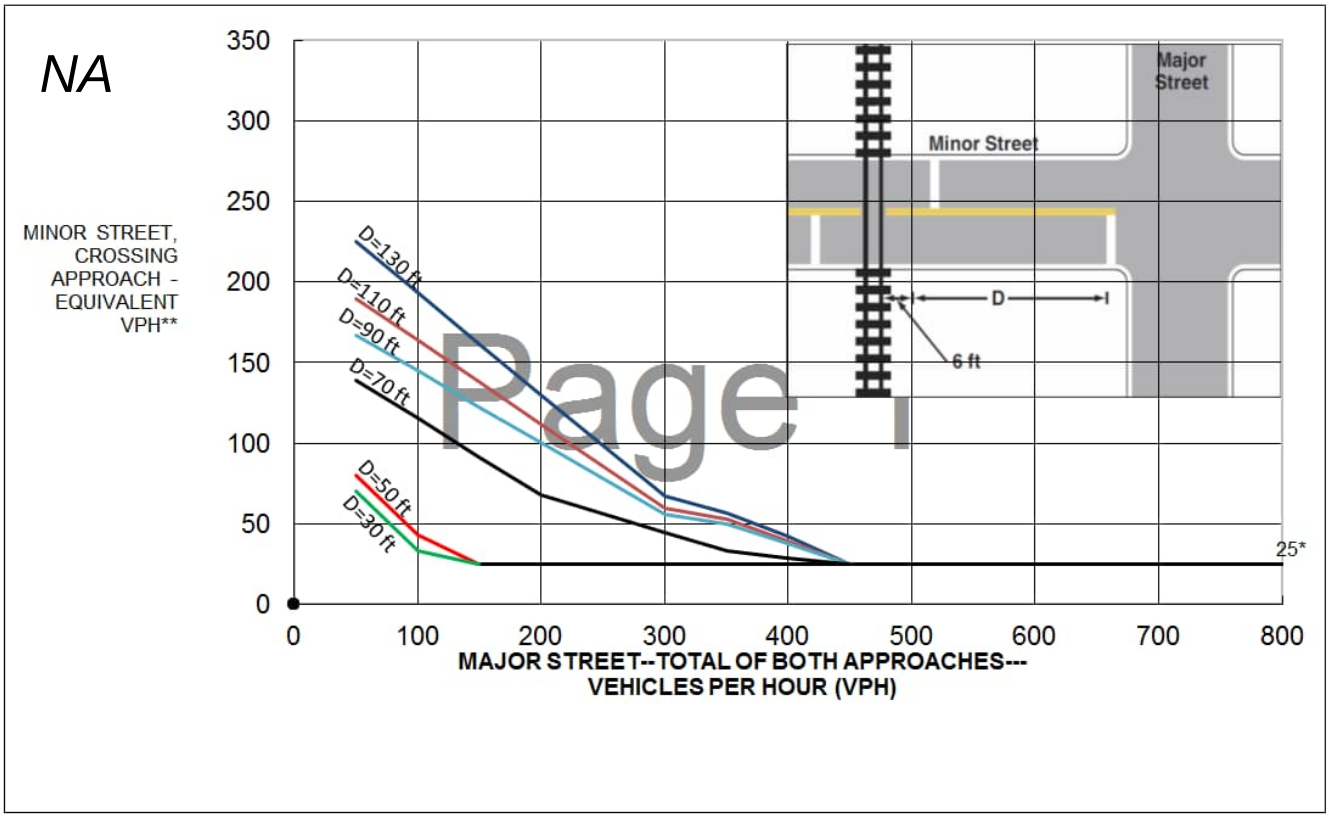


Figure 9. Railroad Grade Crossing (One Approach Lane at the Track Crossing) (Warrant 9.)

Warrant 9. Intersection Near a Grade Crossing (Two or More Approach Lanes at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 10.)

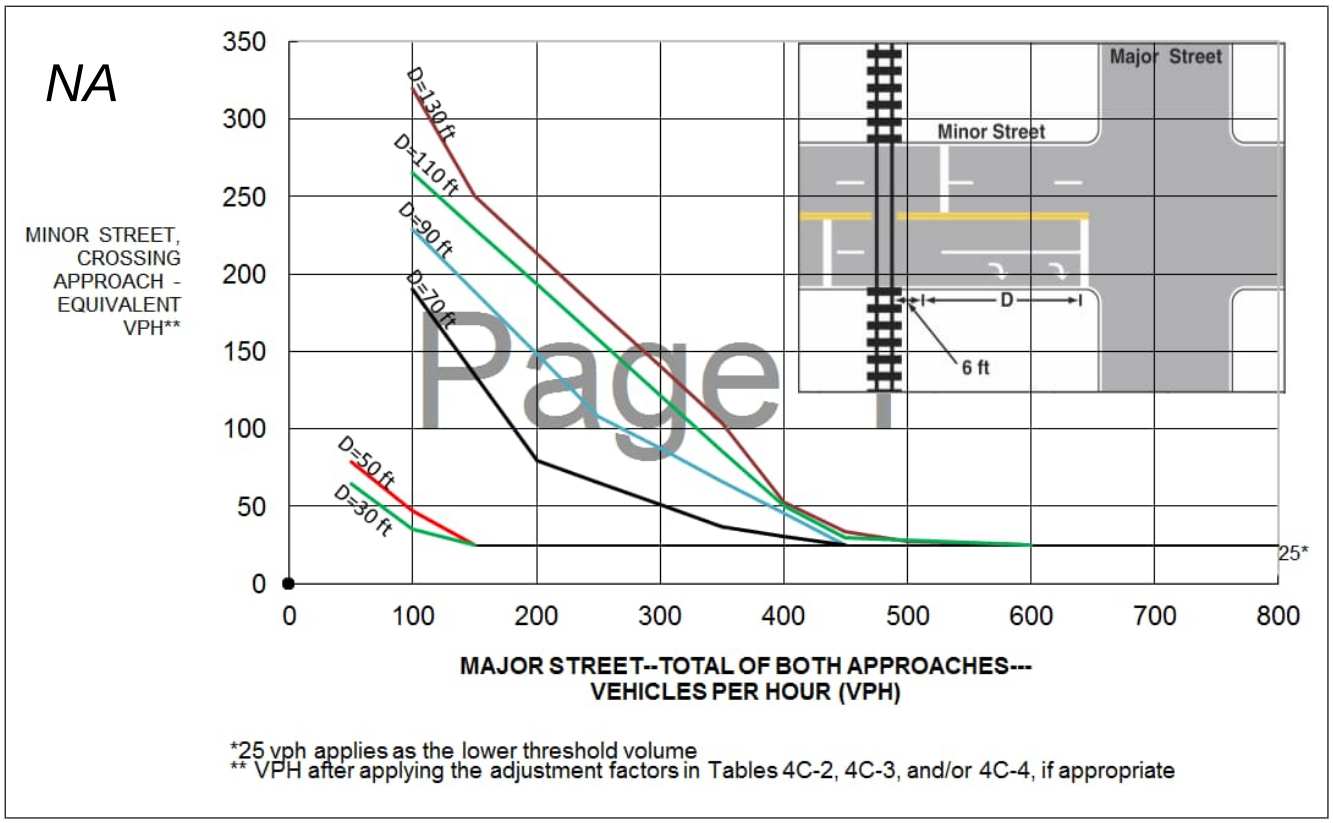


Figure 10. Railroad Grade Crossing (Two or More Approach Lanes at the Track Crossing) (Warrant 9.)

Table 4C-2. Warrant 9, Adjustment Factor for Daily Frequency of Rail Traffic

Rail Traffic per Day	Adjustment Factor
1	0.67
2	0.91
3 to 5	1.00
6 to 8	1.18
9 to 11	1.25
12 or more	1.33

Table 4C-3. Warrant 9, Adjustment Factor for Percentage of High-Occupancy Buses

% of High-Occupancy Buses* on Minor-Street Approach	Adjustment Factor
0%	1.00
2%	1.09
4%	1.19
6% or more	1.32

* A high-occupancy bus is defined as a bus occupied by at least 20 people.

Table 4C-4. Warrant 9, Adjustment Factor for Percentage of Tractor-Trailer Trucks

% of Tractor-Trailer Trucks on Minor-Street Approach	Adjustment Factor	
	D less than 70 feet	D of 70 feet or more
0% to 2.5%	0.50	0.50
2.6% to 7.5%	0.75	0.75
7.6% to 12.5%	1.00	1.00
12.6% to 17.5%	2.30	1.15
17.6% to 22.5%	2.70	1.35
22.6% to 27.5%	3.28	1.64
More than 27.5%	4.18	2.09

Remarks:

Traffic Survey — Count Analysis

Texas Department of Transportation

Form Revised 2/27/2012

2011 TMUTCD Warrants

County: Bexar District: San Angelo

City: San Antonio Population: 200,000 Survey Date: 7/18/2029

		Name	Control	Section	85% Speed
Major	0	Commerce			35 MPH
Minor	0	Picoso			30 MPH

Eight Highest Hours: Include the same 8 hours for the Major and Minor St. volumes.

Time Ends	Major St. - Both App.		Minor St. - Hi. Vol. App.	
	Veh. Total	Ped. Total	Veh. Total	Ped. Total
6:00 PM	1,341	3	14	
5:00 PM	1,227	3	9	
4:00 PM	1,065	0	7	
1:00 PM	962	0	5	
3:00 PM	942	0	6	
7:00 PM	900	0	8	
2:00 PM	897	0	6	
12 NOON	818	0	5	

Comments:

Based on 2029 projected traffic volumes and crash analyses, Signal not warranted at Commerce Street and Picoso Street intersection.

Warrant 1. Eight Hour Vehicular Volume

☐ Yes ☑ No Meets 70%[c] (and major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition A.

– or –

☐ Yes ☑ No Meets 70%[c] (and major-street speed exceeds 40 mph or population less than 10,000) *or* 100%[a] (regardless of speed) of Condition B.

– or –

☐ Yes ☑ No Meets 80%[b] of Conditions A and B.

– or –

☐ Yes ☑ No Meets 56%[d] of Conditions A and B (and major-street speed exceeds 40 mph or population less than 10,000).

Condition A - Minimum Vehicle Volume

Number of Lanes		Vehicles per hour on Major St (Total of Both Approaches)					Vehicles per hour on higher-volume Minor St approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	136.4%	100%[a]	80%[b]	70%[c]	56%[d]	3.0%
1	1	500	400	350	280	0	150	120	105	84	0
2 or more	1	600	480	420	336	818	150	120	105	84	5
2 or more	2 or more	600	480	420	336	0	200	160	140	112	0
1	2 or more	500	400	350	280	0	200	160	140	112	0

Condition B - Interruption of Continuous Traffic

Number of Lanes		Vehicles per hour on Major St (Total of Both Approaches)					Vehicles per hour on higher-volume Minor St approach (One Direction Only)				
Major Street	Minor Street	Required				Existing	Required				Existing
		100%[a]	80%[b]	70%[c]	56%[d]	90.9%	100%[a]	80%[b]	70%[c]	56%[d]	6.1%
1	1	750	600	525	420	0	75	60	53	42	0
2 or more	1	900	720	630	504	818	75	60	53	42	5
2 or more	2 or more	900	720	630	504	0	100	80	70	56	0
1	2 or more	750	600	525	420	0	100	80	70	56	0

[a]Basic minimum hourly volume.

[b]Used for combination of Conditions A and B after adequate trial of other remedial measures.

[c]May be used when the major-street speed exceeds 40 mph or in a community with a population of less than 10,000.

[d]May be used for combination of Conditions A and B after adequat trial of other remedial measures when major street exceeds 40 mph or in an isolated community with a population of less than 10,000.

Warrant 2. Four Hour Volumes

☐ Yes ☑ No	Meets each of 4 Highest Hours (Warrant 2 — see Figure 1).

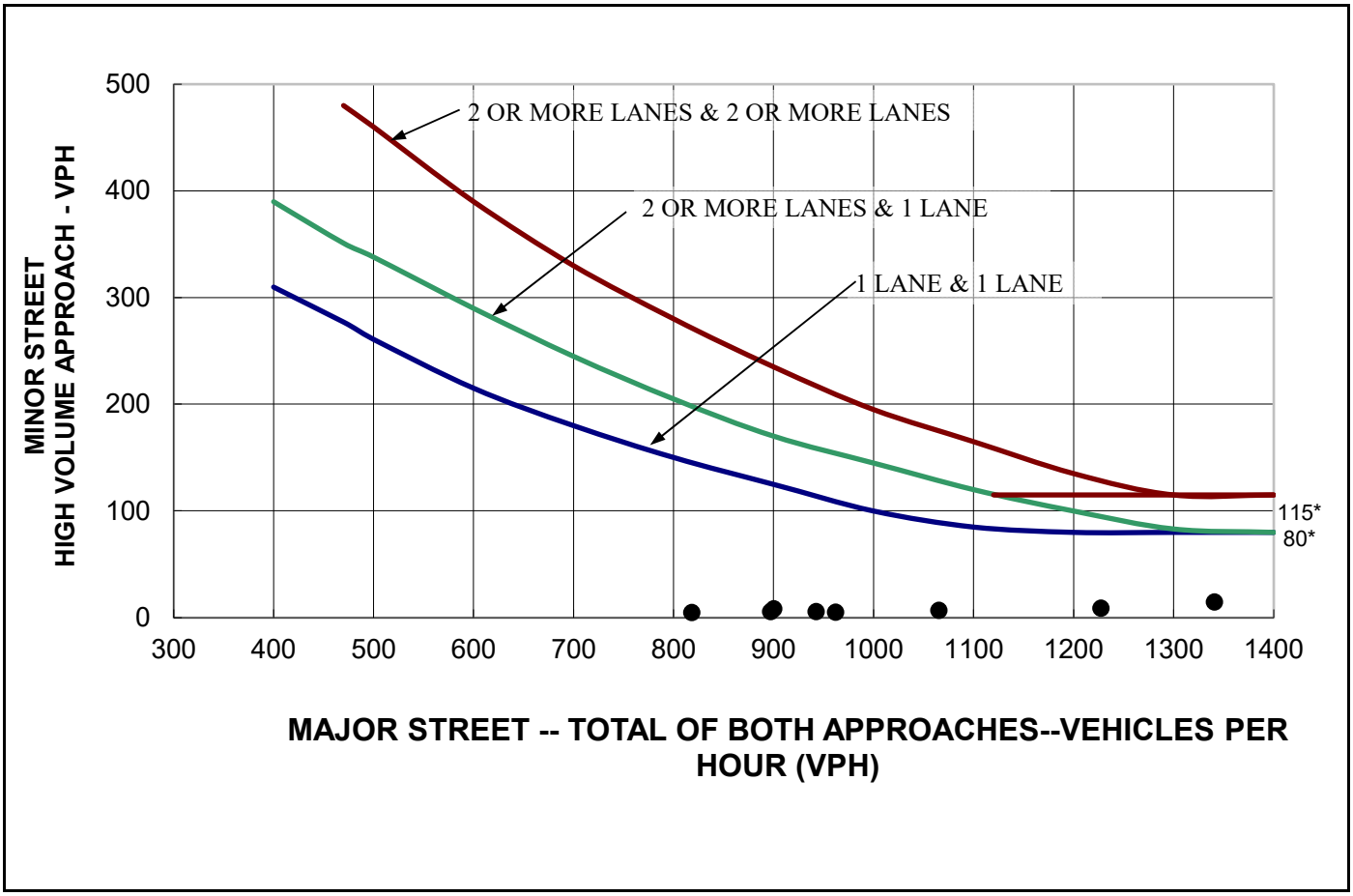


Figure 1. Four-hour volume warrant. (Warrant 2.)

Warrant 3. Peak Hour

☐ Yes ☑ No	Are all of the following conditions true for any four consecutive 15 minute periods? 1. The total stopped time delay experienced by the traffic on one minor street approach (one direction only) controlled by a stop sign equals or exceeds 4 vehicle-hours for a one-lane approach and 5 vehicle-hours for a two-lane approach, *and* 2. The volume of the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes, *and* 3. The total entering volume serviced during the hour equals or exceeds 650 vph for intersections with three approaches or 800 vph for intersections with four (or more) approaches.
	– or –
☐ Yes ☑ No	Meets one High Hour (Warrant 3 — see Figure 2).

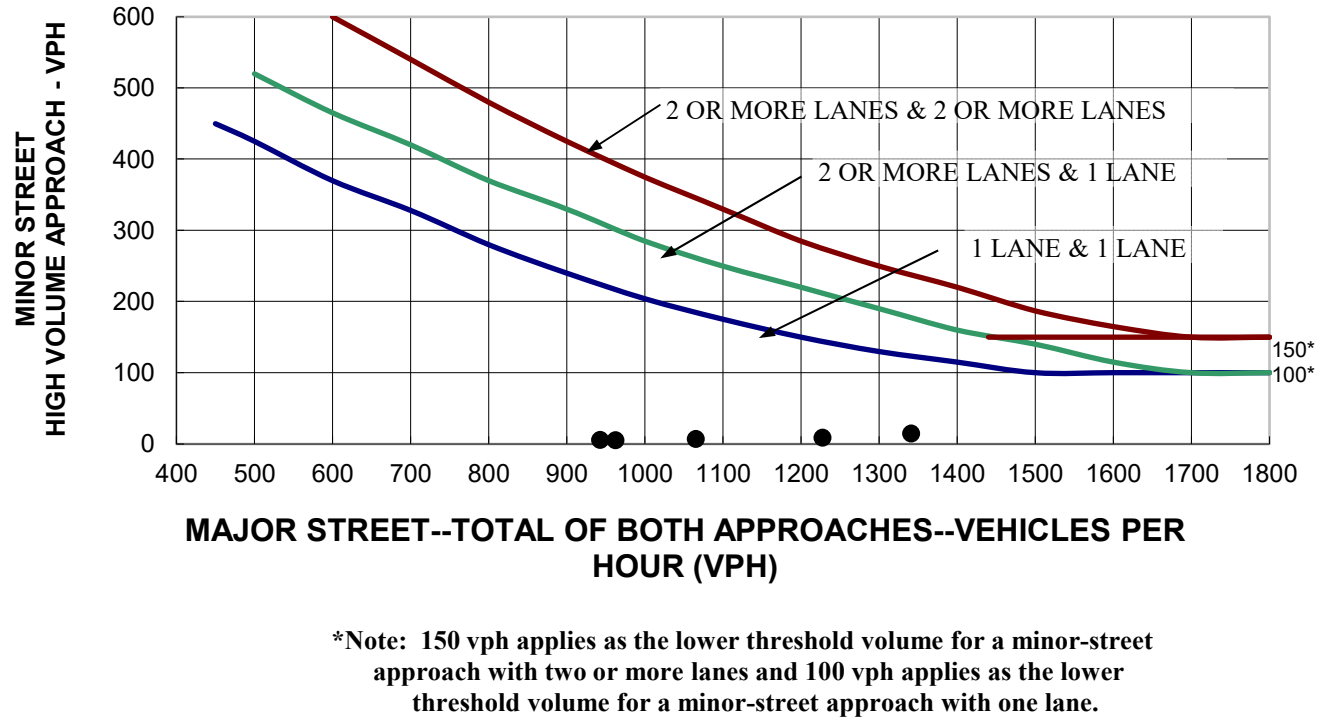


Figure 2. Peak hour volume warrant. (Warrant 3.)

Warrant 4. Four Hour Pedestrian Volume

☐ Yes ☒ No Meets each of 4 Highest Hours (Warrant 4 - see Figure 5 and Figure 6.)

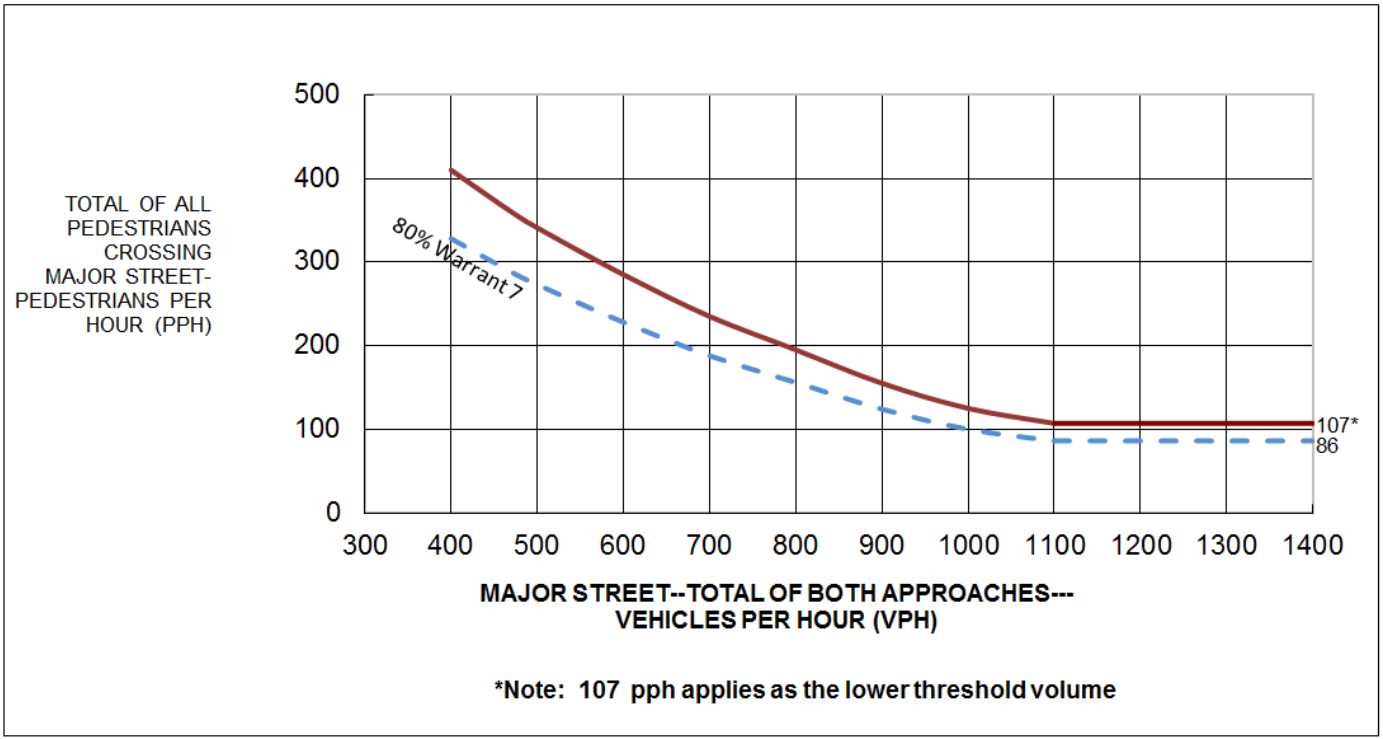


Figure 5. Four hour pedestrian warrant. (Warrant 4.)

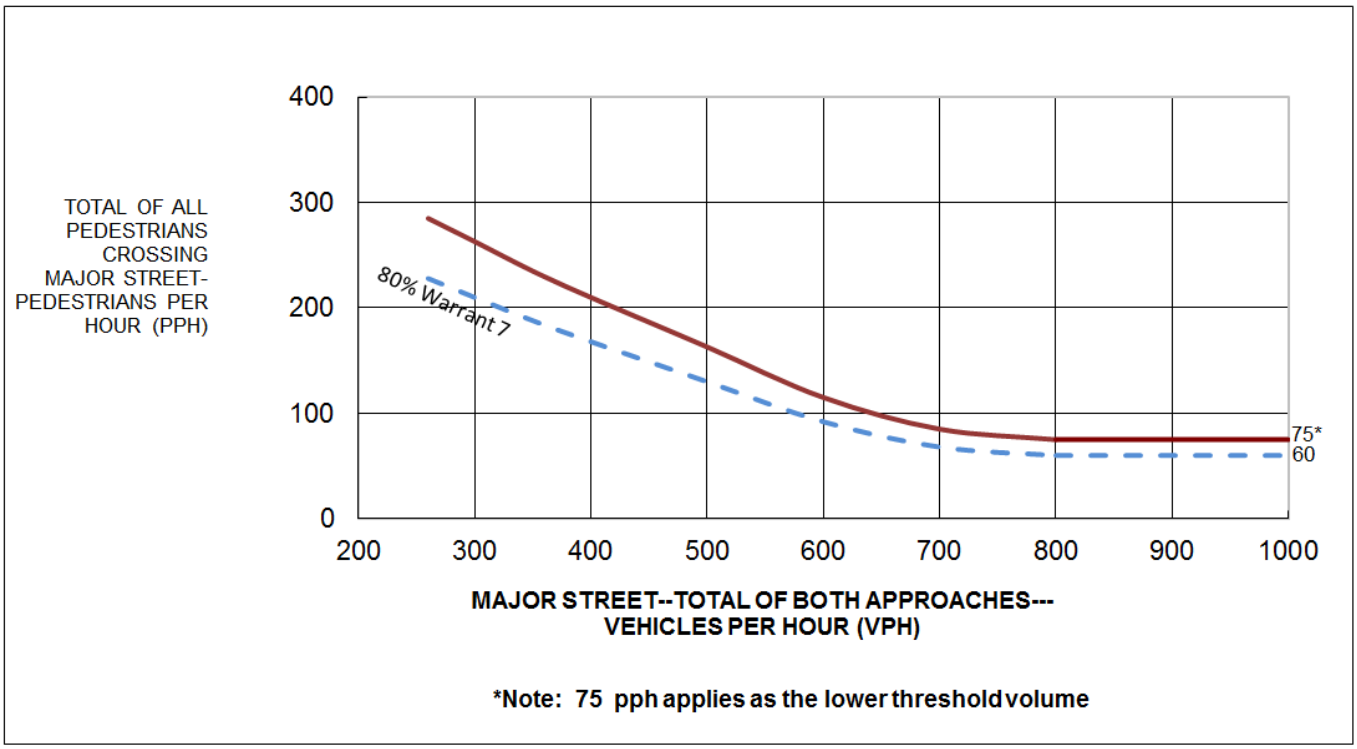


Figure 6. Four hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 35 MPH on major street). (Warrant 4.)

Warrant 4. Peak Hour Pedestrian Volumes

☐ Yes ☒ No Meets Peak Hour Pedestrian (Warrant 4 - see Figure 7 and Figure 8.)

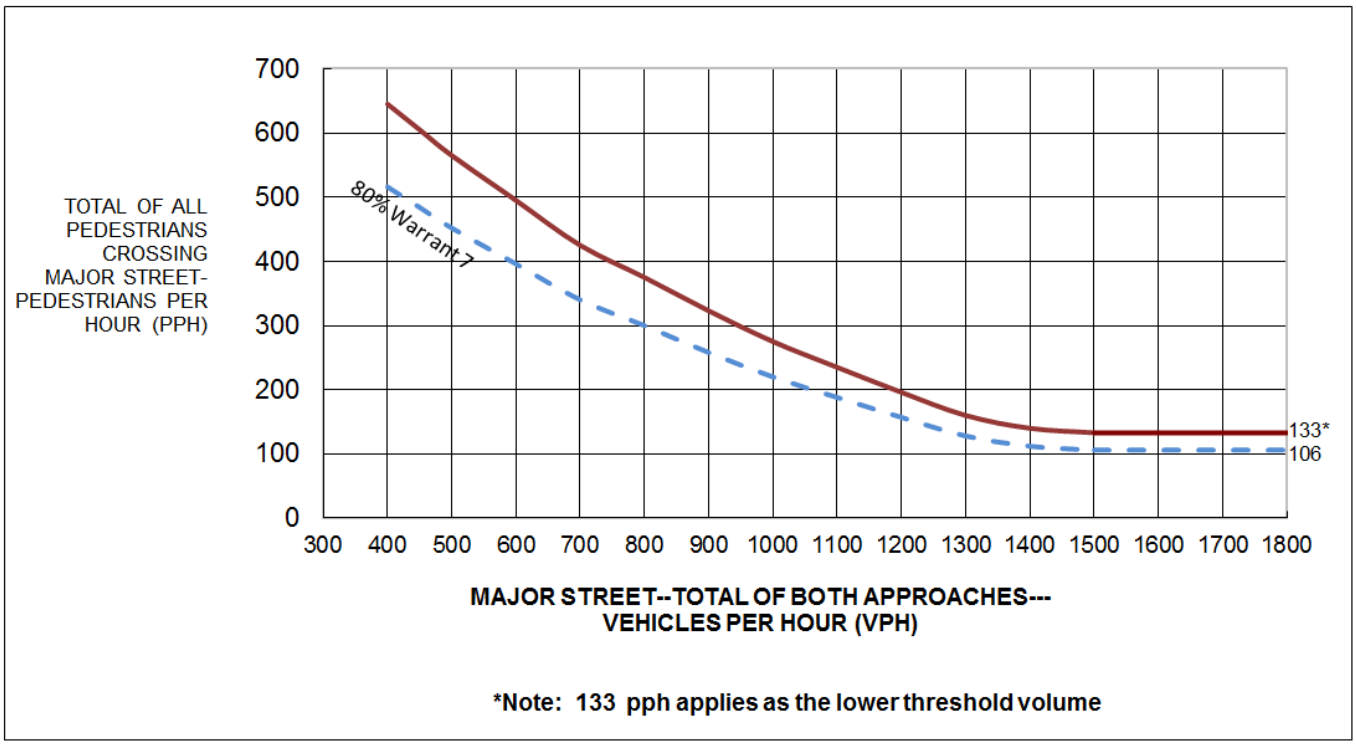


Figure 7. Four hour pedestrian warrant (Warrant 4.)

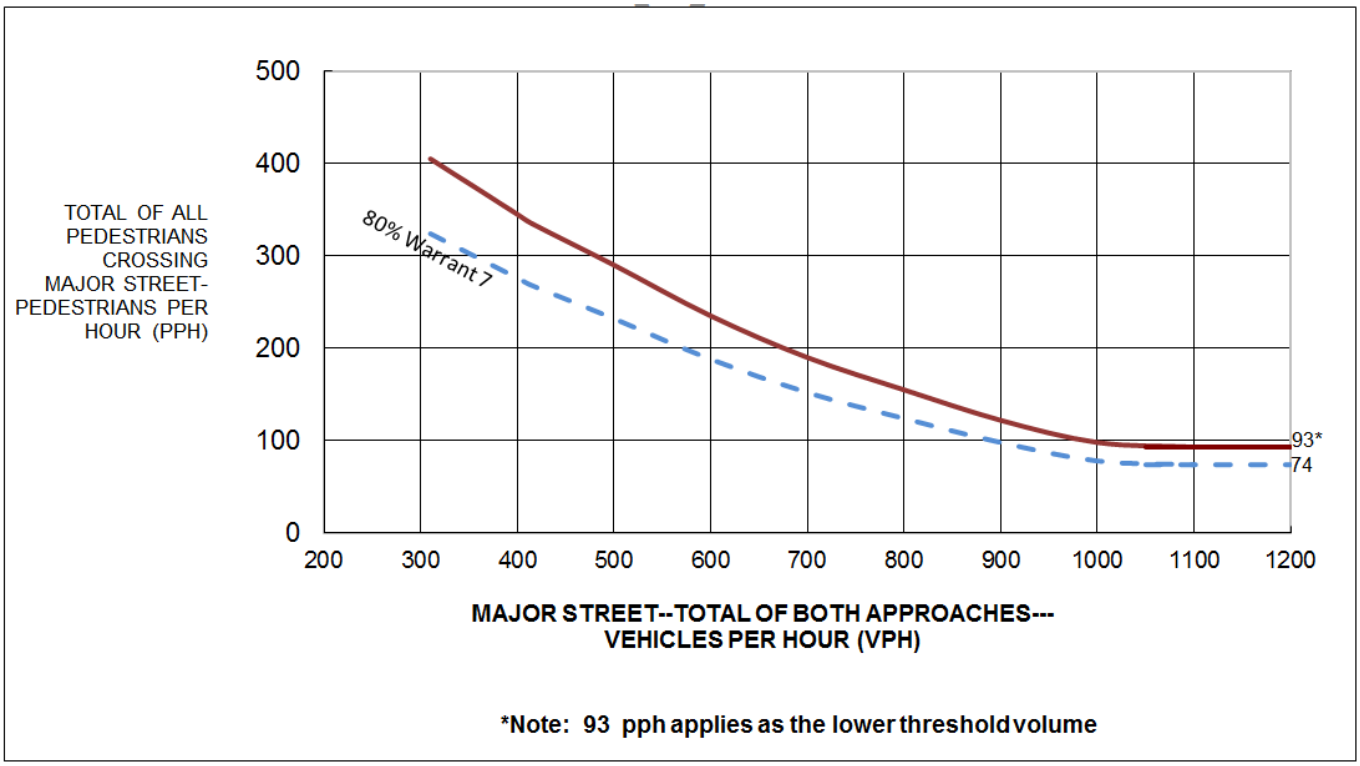


Figure 8. Peak hour pedestrian warrant **(70% Factor)**. (community less than 10,000 population or above 40 MPH on major street). (Warrant 4.)

Warrant 5. School Crossing

☐ Yes ☐ No	Is the number of adequate gaps in traffic stream during the period when the children are using the crossing less than the number of minutes in the same period?
NA	- ***and*** -
☐ Yes ☐ No	Are there a minimum of 20 students during the highest crossing hour?
	- ***and*** -
☐ Yes ☐ No	Is the nearest signal on the major street located more than 300 feet away? (This warrant may be applied if the proposed signal is less than 300 feet and does not restrict the progressive movement of traffic.)

Warrant 6. Coordinated Signal System

☐ Yes ☐ No	On a one-way street or a street with traffic predominantly in one direction, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur?
NA	- ***or*** -
☐ Yes ☐ No	On a two-way street, are the adjacent signals far enough apart that the necessary degree of vehicle platooning does not occur and would the proposed and adjacent traffic control signal provide a progressive operation?

Warrant 7. Crash Experience

☐ Yes ☒ No	Is one of the following conditions met?: ◆ 80% of Condition A or Condition B in Warrant 1 ◆ 56% of Conditions A or B in Warrant 1 (major-street speed exceeding 40 mph or population less than 10,000) ◆ 80% or more of Warrant 4
	- ***and*** -
☐ Yes ☒ No	Have there been 5 or more reported crashes susceptible to correction by a traffic signal in 12 months?

Warrant 8. Roadway Network

NA

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume on all approaches greater than 1000 vehicles for each of any 5 hours of a Saturday and/or Sunday.

- ***or*** -

☐ Yes ☐ No Is the total existing, or immediately projected, entering volume greater than 1000 vehicles for the peak hour of a typical weekday, and do the 5 year projected traffic volumes meet one or more of Warrants 1, 2, and 3 during an average weekday?

Check applicable characteristics of each route (only 1 needs to be checked):

Major Street	Minor Street	
☐ Yes	☐ No	It is part of street or highway system that serves as the principal roadway network for through traffic flow.
☐ Yes	☐ No	It includes rural or suburban highways outside, entering, or traversing a city.
☐ Yes	☐ No	It appears as a major route on an official plan such as a major street plan in an urban area traffic and transportation study.
☐ Yes	☐ No	It connects areas of principal traffic generation.
☐ Yes	☐ No	It has surface street freeway or expressway ramp terminals.

Warrant 9. Intersection Near a Grade Crossing (One Approach Lane at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 9.)

NA

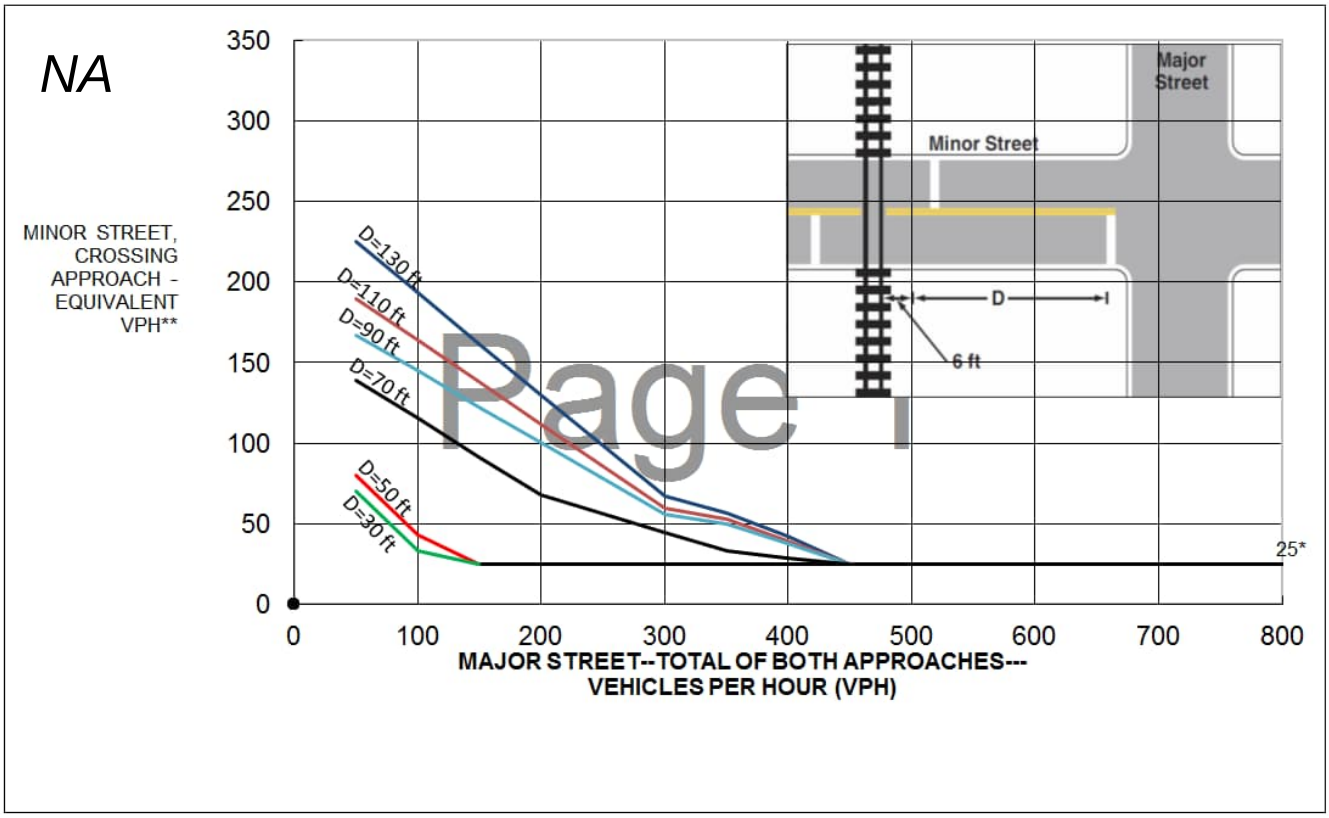


Figure 9. Railroad Grade Crossing (One Approach Lane at the Track Crossing) (Warrant 9.)

Warrant 9. Intersection Near a Grade Crossing (Two or More Approach Lanes at the Track Crossing)

☐ Yes ☐ No Meets one High Hour (Warrant 9 - see Figure 10.)

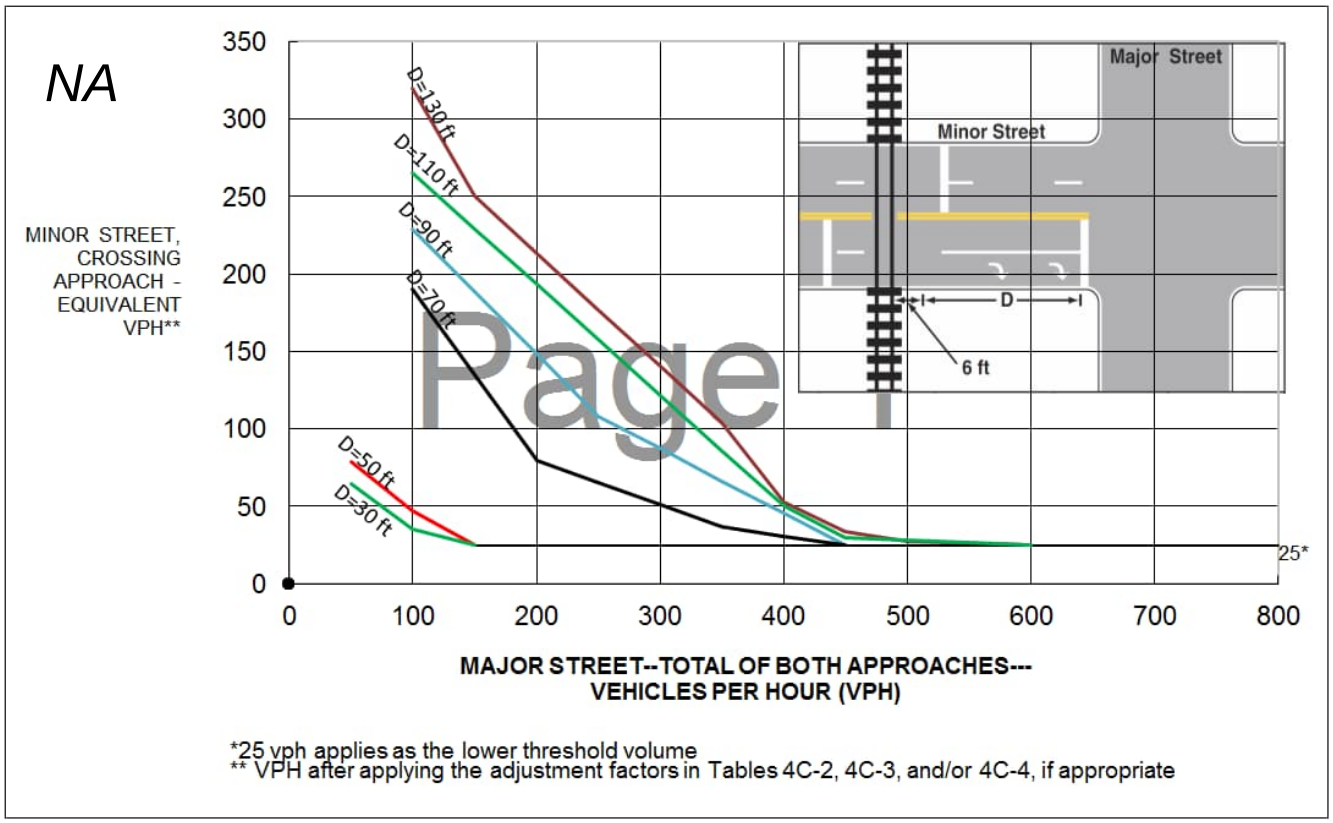


Figure 10. Railroad Grade Crossing (Two or More Approach Lanes at the Track Crossing) (Warrant 9.)

Table 4C-2. Warrant 9, Adjustment Factor for Daily Frequency of Rail Traffic

Rail Traffic per Day	Adjustment Factor
1	0.67
2	0.91
3 to 5	1.00
6 to 8	1.18
9 to 11	1.25
12 or more	1.33

Table 4C-3. Warrant 9, Adjustment Factor for Percentage of High-Occupancy Buses

% of High-Occupancy Buses* on Minor-Street Approach	Adjustment Factor
0%	1.00
2%	1.09
4%	1.19
6% or more	1.32

* A high-occupancy bus is defined as a bus occupied by at least 20 people.

Table 4C-4. Warrant 9, Adjustment Factor for Percentage of Tractor-Trailer Trucks

% of Tractor-Trailer Trucks on Minor-Street Approach	Adjustment Factor	
	D less than 70 feet	D of 70 feet or more
0% to 2.5%	0.50	0.50
2.6% to 7.5%	0.75	0.75
7.6% to 12.5%	1.00	1.00
12.6% to 17.5%	2.30	1.15
17.6% to 22.5%	2.70	1.35
22.6% to 27.5%	3.28	1.64
More than 27.5%	4.18	2.09

Remarks:

E. CRASH MEMO

MEMO

TO: Project File

FROM: Michael Trueblood, PE, PTOE, Jemal Ali, PE, PTOE

SUBJECT: VIA EW BRT Corridor Crash Analyses - Technical Memo

DATE: November 21, 2024

OVERVIEW

The East-West ART (Advanced Rapid Transit) corridor runs from General McMullen Street to Coca Cola Place, traveling west to east through key San Antonio streets. The corridor follows Commerce Street, splitting into Commerce and Market Streets at NW 22nd Street, then merging back onto Commerce Street at I-37. From there, it turns left onto Cherry Street and right onto Houston Street, continuing east to Coca Cola Place. This route passes through downtown, providing access to the entire San Antonio business district, as illustrated in **Figure 1**. An aerial view of the corridor and its surrounding areas is presented in **Figure 2**.

The purpose of this memo is to conduct a thorough analysis of crash data along the VIA East-West ART corridor over the period from 2019 to 2023. The goal of this analysis is to identify potential safety challenges within the corridor, particularly those associated with the implementation of the ART system. This memo also aims to assess specific types of crashes that could potentially be prevented by the introduction of the ART.

By examining crash patterns, we intend to identify key crash types related to the corridor's operation and evaluate how the ART system contributes to improved safety. This assessment will provide a detailed understanding of the ART's role in enhancing traffic safety, helping to quantify its safety benefits and guiding future improvements along the corridor.



Figure 1 – EW ART Project Location

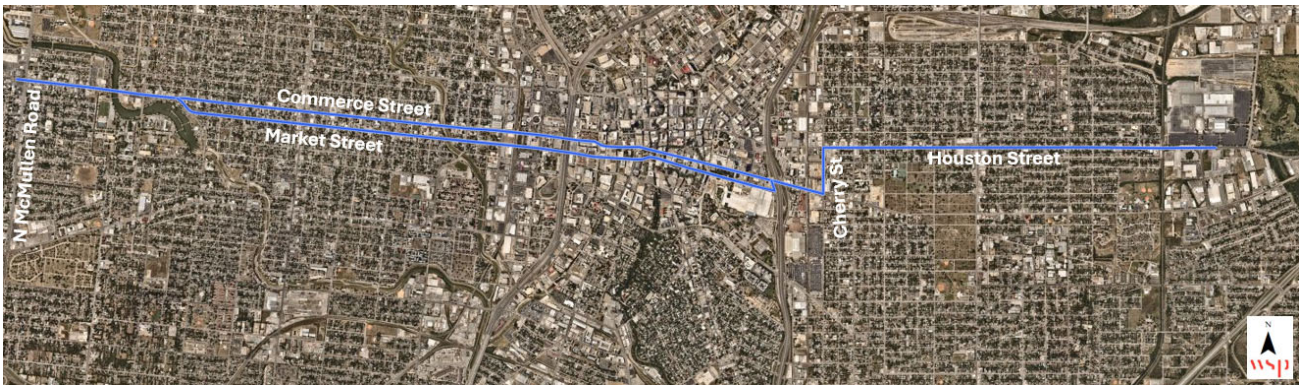


Figure 2 – EW ART Project Area

STUDY PROCEDURE

The study for this corridor was conducted using the following procedures:

- Collected crash data from the Texas Department of Transportation (TxDOT) Crash Records Information System (CRIS) for the period of January 2019 through December 2023, which was subsequently reviewed and analyzed.
- Conducted a detailed review of crash trends over the past five years.
- Evaluated the ART corridor to identify crashes that could potentially be prevented with ART implementation.
- Performed a comparative analysis of crash data before and after the proposed ART deployment using a hot spot map.
- Carried out impact analyses and drew conclusions based on the findings.

CRASH ANALYSIS AND RESULTS

EXISTING CRASH TRENDS

The most recent five years of crash data was obtained from TxDOT CRIS for the period between 2019 to 2023. The data represented all reported vehicle, bicycle, and pedestrian crashes. The crash data includes crashes along the EW corridor. **Table 1** to **Table 3** categorizing crashes by collision type, crash severity, and manner of collision. **Figure 3** illustrates crash locations and their respective severity levels.

Table 1 – Crash Severity Summary

Year	Fatal	Serious Injury	Minor Injury	Possible Injury	Not Injury	Unknown	Total	Percentage
2019	3	4	48	105	392	14	566	*23.8%*
2020	1	1	43	56	274	13	388	*16.3%*
2021	1	8	49	70	318	17	463	*19.5%*
2022	2	6	53	67	296	14	438	*18.4%*
2023		5	78	62	363	16	524	*22.0%*
Total	**7**	**24**	**271**	**360**	**1,643**	**74**		
Percentage	*0.3%*	*1.0%*	*11.4%*	*15.1%*	*69.0%*	*3.1%*		
						Total Crashes	**2,379**	

Table 2 – Manner of Collision Summary

Manner of Collision	K - Fatal Injury	A - Suspected Serious Injury	B - Suspected Minor Injury	C - Possible Injury	N - Not Injured	99 - Unknown	Total	%ge
Angle	1	8	76	120	411	9	**625**	*26.3%*
One Motor Vehicle								
Vehicle	0	3	16	14	127	57	**217**	*9.1%*
Pedestrian	4	5	56	26	9	1	**101**	*4.2%*
Cyclist	1	5	22	10	10	0	**48**	*2.0%*
Opposite Direction	0	0	24	36	147	2	**209**	*8.8%*
Same Direction	1	3	77	153	930	5	**1,169**	*49.1%*
Other	0	0	0	1	9	0	**10**	*0.4%*
Total	**7**	**24**	**271**	**360**	**1,643**	**74**		
Percentage	*0.3%*	*1.0%*	*11.4%*	*15.1%*	*69.1%*	*3.1%*		
Total Crashes							**2,379**	

Table 3 – Crash Type Summary

Year	Angle	Head On	Other	Rear End	Side Swipe	SMV	Left Turn	Right Turn	Total	Percentage
2019	129	2	3	117	84	92	139	0	**566**	*23.8%*
2020	113	2	1	84	40	54	94	0	**388**	*16.3%*
2021	135	6	3	84	45	69	120	1	**463**	*19.5%*
2022	125	2	1	82	49	67	112	0	**438**	*18.4%*
2023	135	2	2	90	79	84	132	0	**524**	*22.0%*
Total	**637**	**14**	**10**	**457**	**297**	**366**	**597**	**1**		
Percentage	*26.8%*	*0.6%*	*0.4%*	*19.2%*	*12.5%*	*15.4%*	*25.1%*	*0.1%*		
Total Crashes									**2,379**	

Between January 1, 2019, and December 31, 2023, a total of 2,379 crashes were recorded along EW ART Corridor. The data from **Table 1** to **Table 3** provide a comprehensive overview of traffic crash trends from 2019 to 2023, covering crash severity, manner of collision, and crash types.

From 2019 to 2023, there were a total of 2,379 crashes along the corridor. The majority (69%) involved no injuries, while 15% resulted in possible injuries, and 11% in minor injuries. Serious injuries accounted for 1%, and fatal crashes made up less than 1%. The year 2019 had the highest number of crashes (566), with a noticeable decline in 2020 (388), followed by slight fluctuations in subsequent years, ending with 524 crashes in 2023.

The most common manner of collision was Same Direction, accounting for 49% of all crashes. Angle collisions were the second most prevalent at 26%. Crashes involving pedestrians resulted in 4 fatalities (two on commerce St close to San Augustine Ave and west of Creek; two on Buena Vista St west of S Smith St and Saint Marry St) and 5 serious injuries, while cyclist-involved crashes had 1 fatality and 5 serious injuries.

Angle and Left Turn crashes were the most frequent crash types, representing 27% and 25% of total crashes, respectively. Rear End crashes accounted for 19%, while Side Swipe and Single Motor Vehicle (SMV) crashes were 12% and 15%, respectively.
Overall, the data shows that most crashes resulted in no injuries or minor injuries, indicating a lower severity in most incidents.

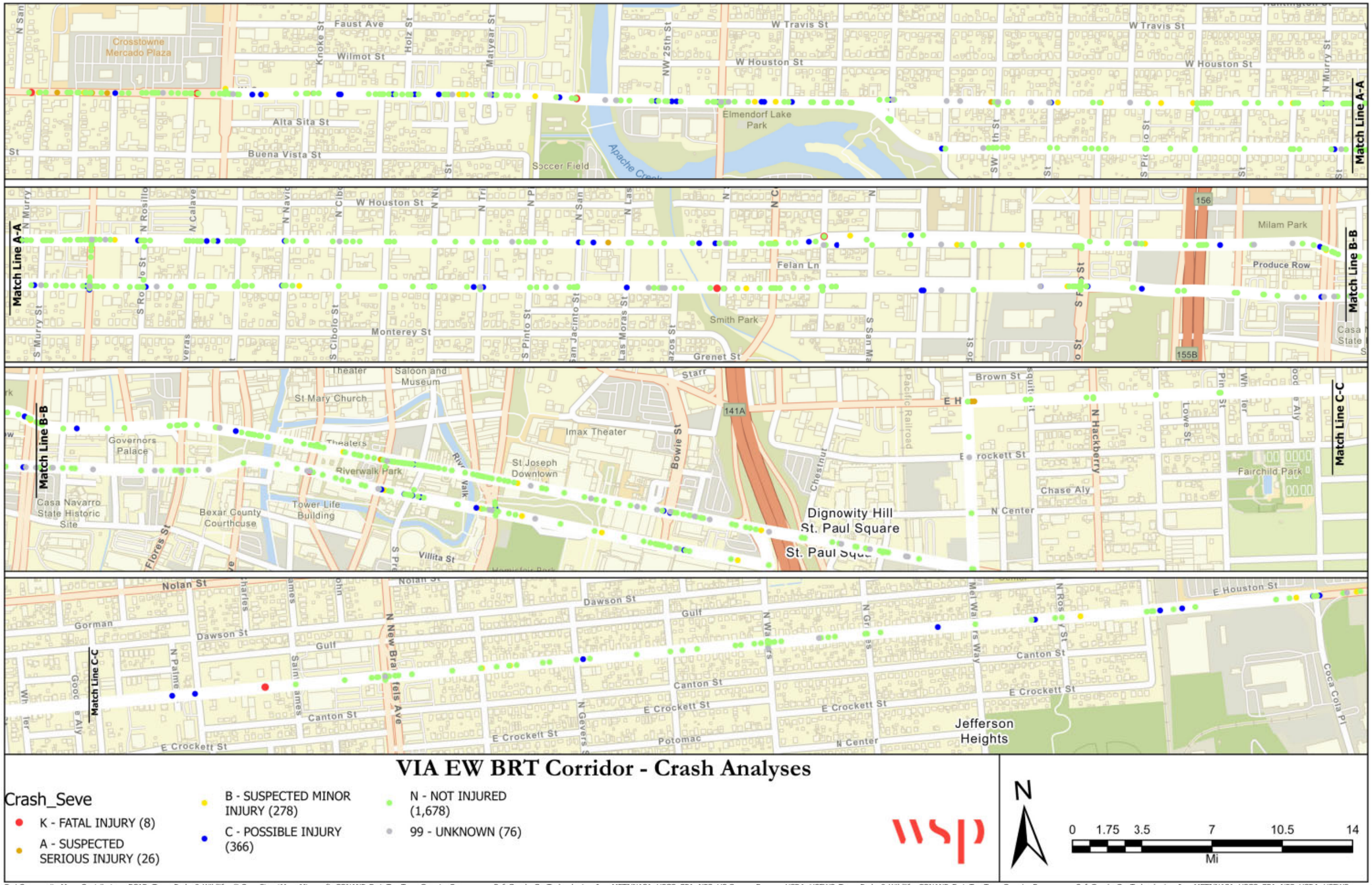


Figure 3 – Crashe Location and Severity

IMPACT ANALYSES

PROPOSED ART CORRIDOR

It is expected that the ART implementation on the center or side median will have an impact in preventing some crashes along the corridor. alignment consists of center as well as along the far left or right lane. **Figure 4** shows the type and location of the ART corridor.

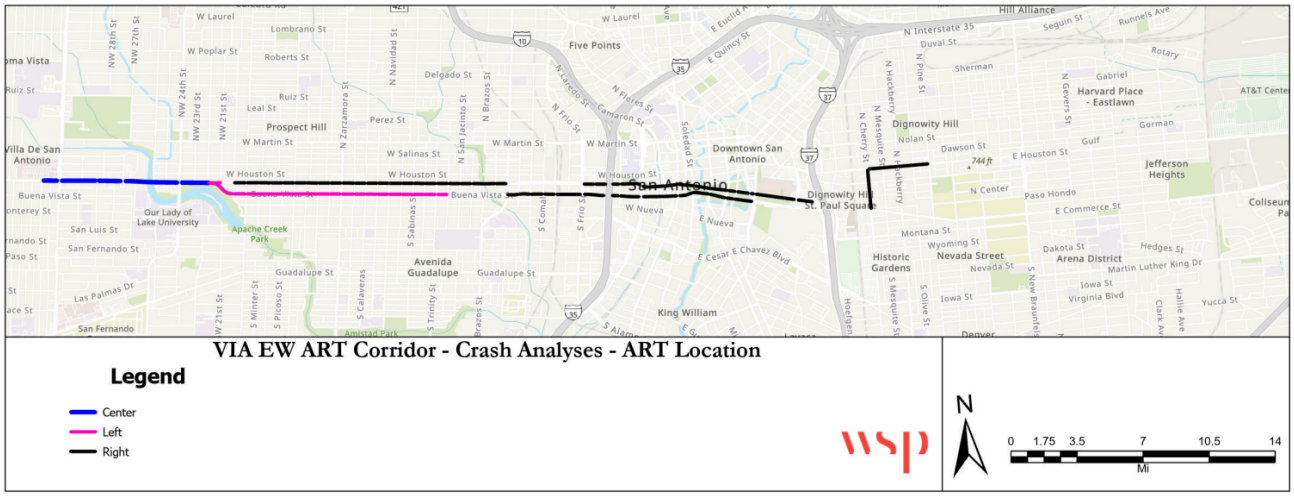


Figure 4 – ART Median Corridor

PREVENTABLE CRASHS ASSUMPTIONS

The study assumes that crashes occurring along the proposed ART corridor, particularly those involving collisions requiring crossing the ART, could be reduced or prevented with ART implementation. This is because the ART acts as a physical barrier, prompting drivers to either avoid such movements or cross more cautiously. A total of 488 crashes were identified along the ART corridors, excluding intersections and areas without center or side medians, as shown in **Table 4**. The following assumptions were made to determine which crashes could be preventable with ART implementation:

- Left turn crashes crossing the ART are preventable by a center or left-side ART.
- Right turn crashes crossing the ART are preventable by implementing a right-side ART.
- Sideswipe crashes can be prevented by reducing multi-lane roads to a single lane in each direction.
- Pedestrian and Cyclist along the Center/Left/Right ART corridor are assumed to be preventable.

IMPROVEMENTS AND RESULT

Based on **Table 4**, it was found that 113 out of the 488 crashes (approximately 23%) along the ART corridor are potentially preventable. The analysis shows that implementing ART could improve safety, especially in high-density areas such as downtown and Zarzamora Street, as demonstrated by the hot spot maps in **Figure 5**. These maps indicate a reduction in crash density in areas where ART is proposed.

- **Preventable Angle Crashes**: 6.5% of crashes involved vehicles traveling at an angle, particularly during left and right turns.
- **Single Motor Vehicle (SMV) Crashes**: Approximately 6.5% are preventable crashes involved single vehicles, 4.5% of which are pedestrian and cycle crashes the rest are during turns.

- **Sideswipe Crashes**: Reducing lanes from two to one with ART implementation could prevent 8.4% of same-direction sideswipe crashes.

Table 4 – Preventable Crash Type Assumptions

Manner of Collision	Manner of Collision Summary	Total Crashes	Crashes along ART Median	Improved by - Center/Left Median*	Improved by Right Median	Preventable Crashes	Percentage***
Angle							
- Both Going Straight	Angle	485	24	√		10	
- One Straight-One Backing	Angle	8	1			0	
- One Straight-One Stopped	Angle	5	1			0	
- One Straight-One Right Turn	Angle	41	9		√	3	
- One Straight-One Left Turn	Left Turn	73	18	√		13	*6.4%*
- One Right Turn-One Left Turn	Angle	2	2	√	√	2	
- One Right Turn-One Stopped	Angle	5	0		√	0	
- Both Left Turn	Left Turn	2	2	√		2	
- One Left Turn-One Stopped	Left Turn	4	1	√		1	
Single Motor Vehicle							
- Going Straight	SMV	237	91	√*	√*	22	
- Turning Right	SMV	27	3		√	2	
- Turning Left	SMV	71	8	√		7	*6.4%*
- Backing	SMV	18	7			0	
- Other	SMV	13	6			0	
Opposite Direction							
- Both Going Straight	Head On	12	2	√		1	
- One Straight-One Backing	Angle	4	0			0	
- One Straight-One Stopped	Head On	2	0			0	
- One Straight-One Right Turn	Right Turn	1	0		√	0	
- One Straight-One Left Turn	Left Turn	175	8	√		7	*2.0%*
- One Backing-One Stopped	Rear End	8	1			0	
- One Right Turn-One Left Turn	Angle	5	2	√	√	2	
- Both Left Turns	Left Turn	1	0	√		0	
- One Left Turn-One Stopped	Rear End	1	1			0	
Other - Both Backing	Other	1	0			0	*0.0%*
Other	Other	9	3			0	
Same Direction							
- Both Going Straight-Rear End	Rear End	140	35			0	
- Both Going Straight-Sideswipe	Side Swipe	297	132	√**	√**	20	
- One Straight-One Stopped	Rear End	308	48			0	
- One Straight-One Right Turn	Angle	59	5		√	4	
- One Straight-One Left Turn	Left Turn	319	76	√		16	*8.4%*
- Both Right Turn	Angle	14	0			0	
- One Right Turn-One Left Turn	Angle	1	0	√	√	0	
- One Right Turn-One Stopped	Angle	8	0		√	0	
- Both Left Turn	Left Turn	23	2	√		1	
- One Left Turn-One Stopped	Left Turn	0	0	√		0	
Total		**2,379**	**488**			**113**	*23.2%*

* Pedestrian and Cyclist along the Center/Left/Right ART corridor.
** Corridor with lane reduction from two to one with ART implementation.
*** percentage of crashes along the ART median that are preventable.

As shown in **Table 5**, same direction crashes (36%) followed by angle crashes (26%) are the are the prevalent crash type that may be preventable by ART implementation.

Overall, implementing ART corridors could mitigate certain types of crashes, contributing to improved roadway safety and reducing preventable incidents by nearly 23%.

Table 5 – Preventable Crash Type Summary

Manner of Collision	K - Fatal Injury	A - Suspected Serious Injury	B - Suspected Minor Injury	C - Possible Injury	N - Not Injured	99 - Unknown	Total	Percentage
Angle	0	1	3	4	22	1	**31**	*27.4%*
One Motor Vehicle								
Vehicle	0	0	1	0	6	1	**8**	*7.1%*
Pedestrian	2	0	8	2	0	0	**12**	*10.6%*
Cyclist	0	2	5	1	3	0	**11**	*9.7%*
Opposite Direction	0	0	2	3	5	0	**10**	*8.8%*
Same Direction	0	0	1	6	34	0	**41**	*36.3%*
Other	0	0	0	0	0	0	**0**	*0.0%*
Total	**2**	**3**	**20**	**16**	**70**	**2**		
Percentage	*1.8%*	*2.7%*	*17.7%*	*14.2%*	*61.9%*	*1.8%*		
Total Crashes							**113**	



Figure 5 – Existing and Future Crashes Hot Spot Map

PEDESTRIAN AND BIYCLE CRASHES

Implementing the ART bus lane is expected to reduce the pedestrian and bicycle crashes along the corridor as bus lane serves as a physical barrier at the median/side of the roadway. The following pedestrian/cyclist experience improvements are expected:

- The bus lane reduces the number of vehicular travel lane and hence it reduces the vehicular/cycle crossing distance.
- Reduces the number of crossings points.
- Improves and add pedestrian crossings at several locations; and
- The proposed design improves crossings at the intersections

The EW ART corridor experiences a total of 148 crashes (101 pedestrian and 48 cyclist) throughout the corridor. Of which of which 23 (15%) crashes are located where the center/side bus lane available and they can be preventable.

As shown in **Table 6**, In addition to the crashes along the bus lane, there are significant intersection/intersection related pedestrian/Bicycle crashes (106) which can be eliminated/reduced due to the pedestrian cross walk improvements proposed at the intersections.

Table 6 – Pedestrian and Bicycle Crash Summary

Intersection Related	Pedestrian	Bicycle	Total	Percentage
Driveway access	2	3	**5**	**3.4%**
Intersection/Intersection Related	**74**	**32**	**106**	**71.1%**
Non-Intersection	25	13	**38**	**25.5%**
Total	**101**	**48**		
Percentage	*67.8%*	*32.2%*	**149**	
Total Crashes				

SUMMARY AND CONCLUSION

In summary, The East-West Advanced Rapid Transit (ART) corridor in San Antonio extends from General McMullen Street to Coca Cola Place, covering key streets like Commerce, Market, and Houston. This corridor, which traverses downtown and the broader business district, is set to enhance transit access across the city. A detailed analysis was conducted to evaluate crash data along this route from 2019 to 2023, with the goal of identifying safety challenges and assessing the potential impact of ART implementation on crash prevention. The study utilized data from the Texas Department of Transportation (TxDOT) Crash Records Information System (CRIS), focusing on vehicle, bicycle, and pedestrian crashes. The analysis aimed to determine if ART corridors could mitigate certain crash types.

Over the five-year period, 2,379 crashes were reported along the East-West ART corridor, with most incidents resulting in no or minor injuries. The predominant crash types were Same Direction (49%), Angle (26%), and Left Turn (25%). Implementing ART is expected to reduce crash rates by acting as a physical barrier, particularly in high-density areas like downtown and Zarzamora Street.

In conclusion, the study found that ART could potentially prevent 23% of crashes, especially Angle, Left Turn, and Sideswipe collisions. Additionally, improvements in pedestrian and bicycle safety are anticipated, as ART lanes could serve as barriers reducing conflict points and enhancing crossings at the intersections.

APPENDICES

Appendix A – Detailed Crash Data Analyses Tables and Graphs

Appendix A

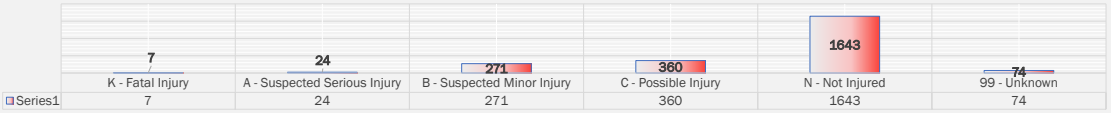
Appendix A – Detailed Crash Data Analyses

Along the Project = 2,379; Along Proposed Center/Side Bus Lane = 488
Mitigable Crashes Along Proposed Bus Lane = 113

Crash Severity Summary for Existing Condition (2019 - 2023)

Manner of Collision	K - Fatal Injury	A - Suspected Serious Injury	B - Suspected Minor Injury	C - Possible Injury	N - Not Injured	99 - Unknown	Total	Percentage
Angle	1	8	76	120	411	9	**625**	*26.3%*
One Motor Vehicle								
Vehicle	0	3	16	14	127	57	**217**	*9.1%*
Pedestrian	4	5	56	26	9	1	**101**	*4.2%*
Cyclist	1	5	22	10	10	0	**48**	*2.0%*
Opposite Direction	0	0	24	36	147	2	**209**	*8.8%*
Same Direction	1	3	77	153	930	5	**1169**	*49.1%*
Other	0	0	0	1	9	0	**10**	*0.4%*
Total	**7**	**24**	**271**	**360**	**1643**	**74**		
Percentage	*0.3%*	*1.0%*	*11.4%*	*15.1%*	*69.1%*	*3.1%*		
Total Crashes							**2379**	

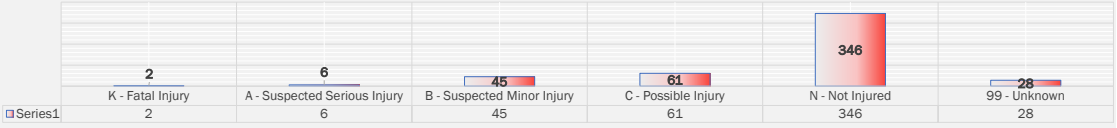
Total Crash severity crash summary



Crash Severity Summary for Existing Condition along the proposed ART Center/Side Median Corridor (2019 - 2023)

Manner of Collision	K - Fatal Injury	A - Suspected Serious Injury	B - Suspected Minor Injury	C - Possible Injury	N - Not Injured	99 - Unknown	Total	Percentage
Angle	0	1	7	7	41	2	**58**	*2.4%*
One Motor Vehicle								
Vehicle	0	2	7	5	53	25	**92**	*3.9%*
Pedestrian	2	0	8	2	0	0	**12**	*0.5%*
Cyclist	0	2	5	1	3	0	**11**	*0.5%*
Opposite Direction	0	0	2	3	9	0	**14**	*0.6%*
Same Direction	0	1	16	43	237	1	**298**	*12.5%*
Other	0	0	0	0	3	0	**3**	*0.1%*
Total	**2**	**6**	**45**	**61**	**346**	**28**		
Percentage	*0.1%*	*0.3%*	*1.9%*	*2.6%*	*14.5%*	*1.2%*		
Total Crashes							**488**	

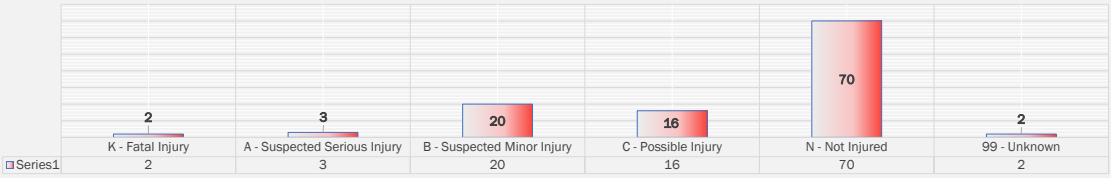
Total Crash Along ART Corridor severity crash summary (2019 - 2023)



Crash Severity Summary for Preventable Crashes along the proposed ART Center/Side Median Corridor (2019 - 2023)

Manner of Collision	K - Fatal Injury	A - Suspected Serious Injury	B - Suspected Minor Injury	C - Possible Injury	N - Not Injured	99 - Unknown	Total	Percentage
Angle	0	1	3	4	22	1	**31**	*27.4%*
One Motor Vehicle								
Vehicle	0	0	1	0	6	1	**8**	*7.1%*
Pedestrian	2	0	8	2	0	0	**12**	*10.6%*
Cyclist	0	2	5	1	3	0	**11**	*9.7%*
Opposite Direction	0	0	2	3	5	0	**10**	*8.8%*
Same Direction	0	0	1	6	34	0	**41**	*36.3%*
Other	0	0	0	0	0	0	**0**	*0.0%*
Total	**2**	**3**	**20**	**16**	**70**	**2**		
Percentage	*1.8%*	*2.7%*	*17.7%*	*14.2%*	*61.9%*	*1.8%*		
Total Crashes							**113**	

Total Preventable Crash severity crash summary (2019 - 2023)



VIA E/W LRT Corridor
Crash Analyses

Crash Severity Summary for Existing Condition (2019 - 2023)

Count of Crash Severity	Column Labels						
Row Labels	99 - UNKNOWN	A - SUSPECTED SERIOUS INJURY	B - SUSPECTED MINOR INJURY	C - POSSIBLE INJURY	K - FATAL INJURY	N - NOT INJURED	Total
ANGLE - BOTH GOING STRAIGHT	6	8	65	96	1	309	485
ANGLE - BOTH LEFT TURN				1		1	2
ANGLE - ONE LEFT TURN-ONE STOPPED	1					3	4
ANGLE - ONE RIGHT TURN-ONE LEFT TURN						2	2
ANGLE - ONE RIGHT TURN-ONE STOPPED						5	5
ANGLE - ONE STRAIGHT-ONE BACKING						8	8
ANGLE - ONE STRAIGHT-ONE LEFT TURN	1		7	16		49	73
ANGLE - ONE STRAIGHT-ONE RIGHT TURN			4	6		31	41
ANGLE - ONE STRAIGHT-ONE STOPPED	1			1		3	5
ONE MOTOR VEHICLE - BACKING	6		1	1		10	18
ONE MOTOR VEHICLE - GOING STRAIGH	37	10	60	30	4	96	237
ONE MOTOR VEHICLE - OTHER	8	1				4	13
ONE MOTOR VEHICLE - TURNING LEFT	4	2	28	14	1	22	71
ONE MOTOR VEHICLE - TURNING RIGHT	3		5	5		14	27
OPPOSITE DIRECTION - BOTH GOING STRAIGHT				4		8	12
OPPOSITE DIRECTION - BOTH LEFT TURNS						1	1
OPPOSITE DIRECTION - ONE BACKING-ONE STOPPED				1		7	8
OPPOSITE DIRECTION - ONE LEFT TURN-ONE STOPPED						1	1
OPPOSITE DIRECTION - ONE RIGHT TURN-ONE LEFT TURN			1	1		3	5
OPPOSITE DIRECTION - ONE STRAIGHT-ONE BACKING						4	4
OPPOSITE DIRECTION - ONE STRAIGHT-C	2		23	30		120	175
OPPOSITE DIRECTION - ONE STRAIGHT-ONE RIGHT TURN						1	1
OPPOSITE DIRECTION - ONE STRAIGHT-ONE STOPPED						2	2
OTHER				1		8	9
OTHER - BOTH BACKING						1	1
SAME DIRECTION - BOTH GOING STRAIGHT-REAR END		1	14	24	1	100	140
SAME DIRECTION - BOTH GOING STRAIG	2	1	10	16		268	297
SAME DIRECTION - BOTH LEFT TURN			2	3		18	23
SAME DIRECTION - BOTH RIGHT TURN	2					12	14
SAME DIRECTION - ONE RIGHT TURN-ONE LEFT TURN						1	1
SAME DIRECTION - ONE RIGHT TURN-ONE STOPPED						8	8
SAME DIRECTION - ONE STRAIGHT-ONE I	1		25	50		243	319
SAME DIRECTION - ONE STRAIGHT-ONE RIGHT TURN			3	8		48	59
SAME DIRECTION - ONE STRAIGHT-ONE STOPPED		1	23	52		232	308
Total	**74**	**24**	**271**	**360**	**7**	**1643**	**2379**

Count of Crash Year	Column Labels						
Row Labels	99 - UNKNOWN	A - SUSPECTED SERIOUS INJURY	B - SUSPECTED MINOR INJURY	C - POSSIBLE INJURY	K - FATAL INJURY	N - NOT INJURED	Grand Total
2019	14	4	48	105	3	392	566
2020	13	1	43	56	1	274	388
2021	17	8	49	70	1	318	463
2022	14	6	53	67	2	296	438
2023	16	5	78	62		363	524
Grand Total	**74**	**24**	**271**	**360**	**7**	**1643**	**2379**

Count of Crash Year	Column Labels					
Row Labels	2019	2020	2021	2022	2023	Grand Total
ANIMAL	1				1	2
FIXED OBJECT	30	25	32	23	26	136
MOTOR VEHICLE IN TRANSPORT	474	334	394	371	440	2013
OTHER NON COLLISION		1				1
OTHER OBJECT	1	1	2	3	2	9
OVERTURNED	1	1			1	3
PARKED CAR	20	10	10	8	17	65
PEDALCYCLIST	11	6	8	8	15	48
PEDESTRIAN	28	10	17	25	21	101
RR TRAIN					1	1
Grand Total	**566**	**388**	**463**	**438**	**524**	**2379**

VIA E/W LRT Corridor
Crash Analyses

Crash Severity Summary for Existing Condition along the proposed Median Corridor (2019 - 2023)

Count of Crash Severity	Column Labels						
Row Labels	**99 - UNKNOWN**	**A - SUSPECTED SERIOUS INJURY**	**B - SUSPECTED MINOR INJURY**	**C - POSSIBLE INJURY**	**K - FATAL INJURY**	**N - NOT INJURED**	**Grand Total**
ANGLE - BOTH GOING STRAIGHT		1	4	1		18	24
ANGLE - BOTH LEFT TURN				1		1	2
ANGLE - ONE LEFT TURN-ONE STOPPED	1						1
ANGLE - ONE STRAIGHT-ONE BACKING						1	1
ANGLE - ONE STRAIGHT-ONE LEFT TURN	1		2	3		12	18
ANGLE - ONE STRAIGHT-ONE RIGHT TURN			1	2		6	9
ANGLE - ONE STRAIGHT-ONE STOPPED						1	1
ONE MOTOR VEHICLE - BACKING	2					5	7
ONE MOTOR VEHICLE - GOING STRAIGHT	16	4	19	8	2	42	91
ONE MOTOR VEHICLE - OTHER	5					1	6
ONE MOTOR VEHICLE - TURNING LEFT	2		1			5	8
ONE MOTOR VEHICLE - TURNING RIGHT						3	3
OPPOSITE DIRECTION - BOTH GOING STRAIGHT				1		1	2
OPPOSITE DIRECTION - ONE BACKING-ONE STOPPED						1	1
OPPOSITE DIRECTION - ONE RIGHT TURN-ONE LEFT TURN						2	2
OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN			2	2		4	8
OTHER						3	3
SAME DIRECTION - BOTH GOING STRAIGHT-REAR END			4	7		24	35
SAME DIRECTION - BOTH GOING STRAIGHT-SIDESWIPE	1		3	8		120	132
SAME DIRECTION - BOTH LEFT TURN						2	2
SAME DIRECTION - ONE STRAIGHT-ONE LEFT TURN			5	13		58	76
SAME DIRECTION - ONE STRAIGHT-ONE RIGHT TURN				1		4	5
SAME DIRECTION - ONE STRAIGHT-ONE STOPPED		1	4	14		29	48
ANGLE - ONE RIGHT TURN-ONE LEFT TURN						2	2
OPPOSITE DIRECTION - ONE LEFT TURN-ONE STOPPED						1	1
Grand Total	**28**	**6**	**45**	**61**	**2**	**346**	**488**

Mitigated_Crashes	(All)
BRT	(Multiple Items)

Count of Crash Year	Column Labels						
Row Labels	**99 - UNKNOWN**	**A - SUSPECTED SERIOUS INJURY**	**- SUSPECTED MINOR INJU**	**C - POSSIBLE INJURY**	**K - FATAL INJURY**	**N - NOT INJURED**	**Grand Total**
2019	4	1	5	20	1	82	113
2020	6		7	9		58	80
2021	8	2	7	10		64	91
2022	5	1	14	9	1	66	96
2023	5	2	12	13		76	108
Grand Total	**28**	**6**	**45**	**61**	**2**	**346**	**488**

Mitigated_Crashes	(All)
BRT	(Multiple Items)

Count of Crash Year	Column Labels						
Row Labels	**99 - UNKNOWN**	**A - SUSPECTED SERIOUS INJURY**	**B - SUSPECTED MINOR INJURY**	**C - POSSIBLE INJURY**	**K - FATAL INJURY**	**N - NOT INJURED**	**Grand Total**
ANIMAL						1	1
FIXED OBJECT	10	1	5	5		35	56
MOTOR VEHICLE IN TRANSPORT	3	2	25	53		290	373
OTHER OBJECT						3	3
OVERTURNED		1					1
PARKED CAR	15		2			14	31
PEDALCYCLIST		2	5	1		3	11
PEDESTRIAN			8	2	2		12
Grand Total	**28**	**6**	**45**	**61**	**2**	**346**	**488**

Mitigated_Crashes	1

Mitigable Crash for proposed Condition along the proposed Center and Side Median Corridors

Count of Crash Severity	Column Labels						
Row Labels	99 - UNKNOWN	A - SUSPECTED SERIOUS INJURY	B - SUSPECTED MINOR INJURY	C - POSSIBLE INJURY	K - FATAL INJURY	N - NOT INJURED	Grand Total
ANGLE - ONE STRAIGHT-ONE LEFT TURN			2	3		8	13
ANGLE - ONE STRAIGHT-ONE RIGHT TURN						3	3
ONE MOTOR VEHICLE - GOING STRAIGHT		2	13	3	2	2	22
ONE MOTOR VEHICLE - TURNING LEFT	1		1			5	7
ONE MOTOR VEHICLE - TURNING RIGHT						2	2
OPPOSITE DIRECTION - BOTH GOING STRAIGHT				1			1
OPPOSITE DIRECTION - ONE RIGHT TURN-ONE LEFT TURN						2	2
OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN			2	2		3	7
SAME DIRECTION - BOTH GOING STRAIGHT-SIDESWIPE				3		17	20
SAME DIRECTION - BOTH LEFT TURN						1	1
SAME DIRECTION - ONE STRAIGHT-ONE LEFT TURN			1	2		13	16
SAME DIRECTION - ONE STRAIGHT-ONE RIGHT TURN				1		3	4
ANGLE - ONE RIGHT TURN-ONE LEFT TURN						2	2
Grand Total	**2**	**3**	**20**	**16**	**2**	**70**	**113**

Mitigated_Crashes	1

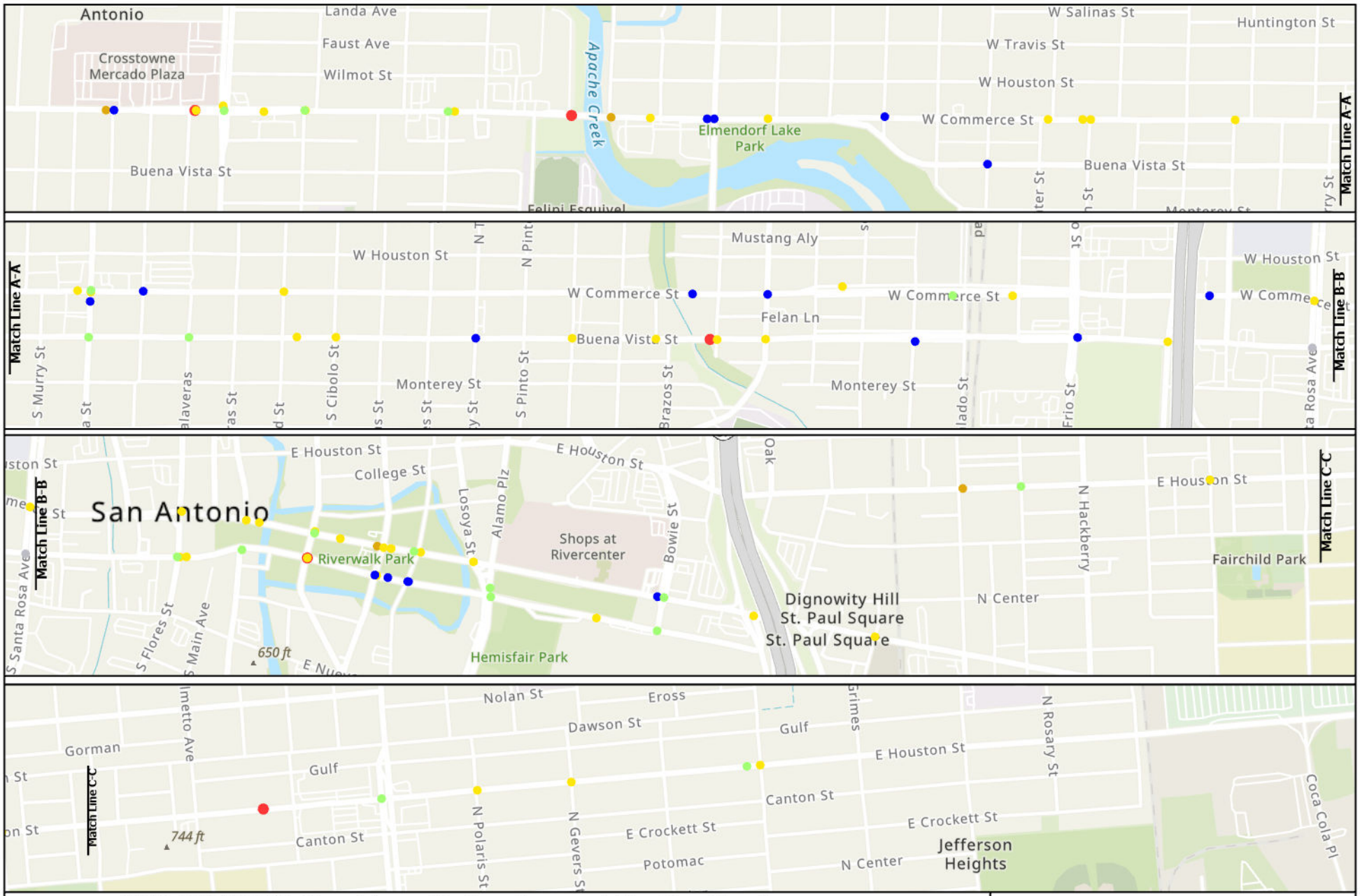
Count of Crash Year	Column Labels						
Row Labels	99 - UNKNOWN	A - SUSPECTED SERIOUS INJURY	B - SUSPECTED MINOR INJURY	C - POSSIBLE INJURY	K - FATAL INJURY	N - NOT INJURED	Grand Total
2019			2	5	1	11	19
2020	1		2	5		11	19
2021	1	1	3	2		16	23
2022			9		1	17	27
2023		2	4	4		15	25
Grand Total	**2**	**3**	**20**	**16**	**2**	**70**	**113**

Mitigated_Crashes	1

Count of Crash Year	Column Labels						
Row Labels	99 - UNKNOWN	A - SUSPECTED SERIOUS INJURY	B - SUSPECTED MINOR INJURY	C - POSSIBLE INJURY	K - FATAL INJURY	N - NOT INJURED	Grand Total
FIXED OBJECT	1		1			4	6
MOTOR VEHICLE IN TRANSPORT	1	1	6	13		61	82
OTHER OBJECT						1	1
PARKED CAR						1	1
PEDALCYCLIST		2	5	1		3	11
PEDESTRIAN			8	2	2		12
Grand Total	**2**	**3**	**20**	**16**	**2**	**70**	**113**

Mitigated_Crashes	1

Count of Crash Year	Column Labels						
Row Labels	FIXED OBJECT	MOTOR VEHICLE IN TRANSPORT	OTHER OBJECT	PARKED CAR	PEDALCYCLIST	PEDESTRIAN	Grand Total
DRIVEWAY ACCESS	**1**	**30**			**2**	**1**	**34**
Center	1	16			1	1	19
Left		12					12
Right		2			1		3
INTERSECTION		**21**			**1**		**22**
Center		13					13
Left		3					3
Right		5			1		6
INTERSECTION RELATED	**4**	**10**	**1**	**1**	**2**		**18**
Center	3	6			2		11
Left		3	1				4
Right	1	1		1			3
NON INTERSECTION	**1**	**21**			**6**	**11**	**39**
Center		10			2	5	17
Left	1	9				1	11
Right		2			4	5	11
Grand Total	**6**	**82**	**1**	**1**	**11**	**12**	**113**



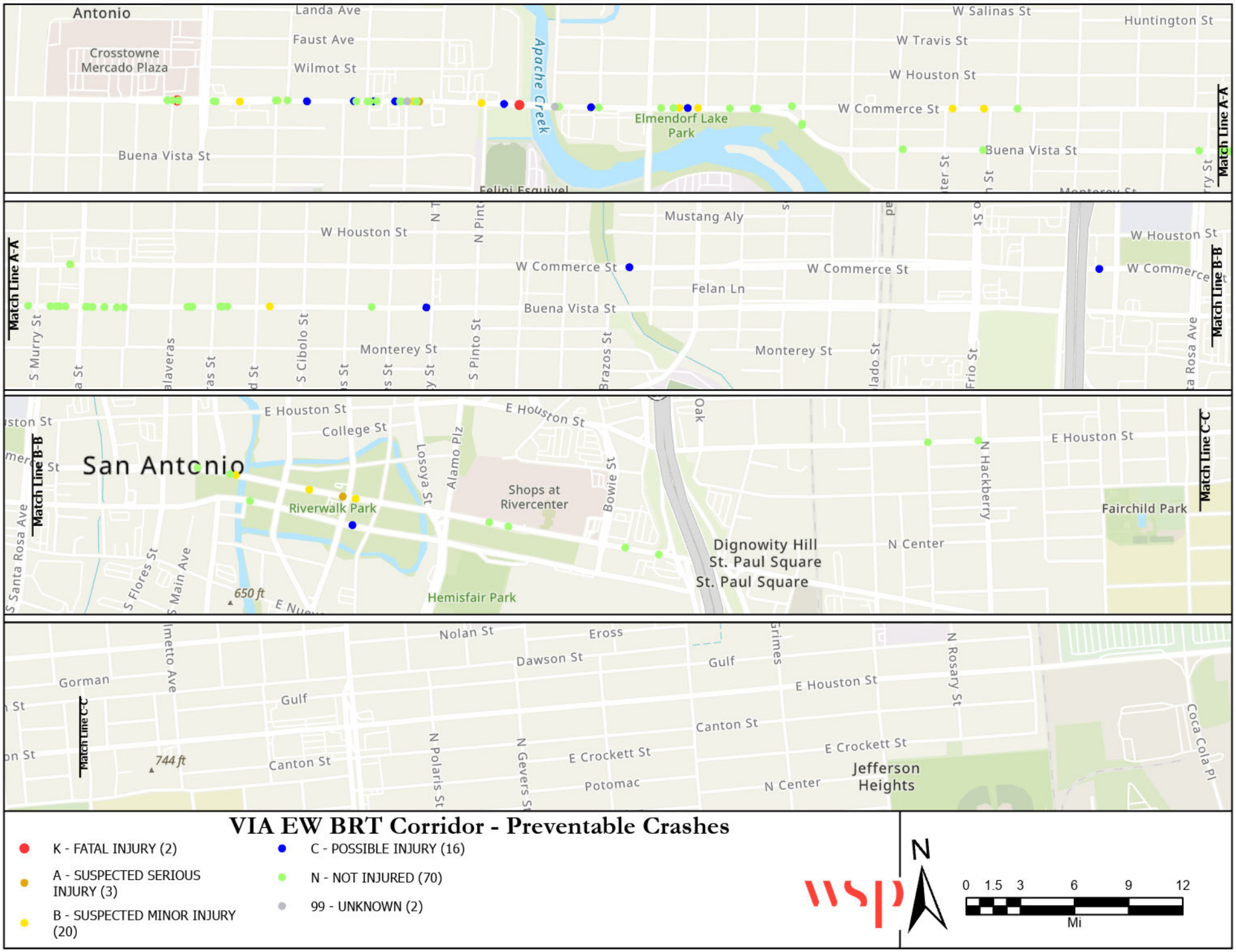
VIA EW BRT Corridor - Pedestrian and Cyclist Crashes

- K - FATAL INJURY (5)
- A - SUSPECTED SERIOUS INJURY (10)
- B - SUSPECTED MINOR INJURY (78)
- C - POSSIBLE INJURY (36)
- N - NOT INJURED (19)
- 99 - UNKNOWN (1)

N

0 1.5 3 6 9 12

Mi



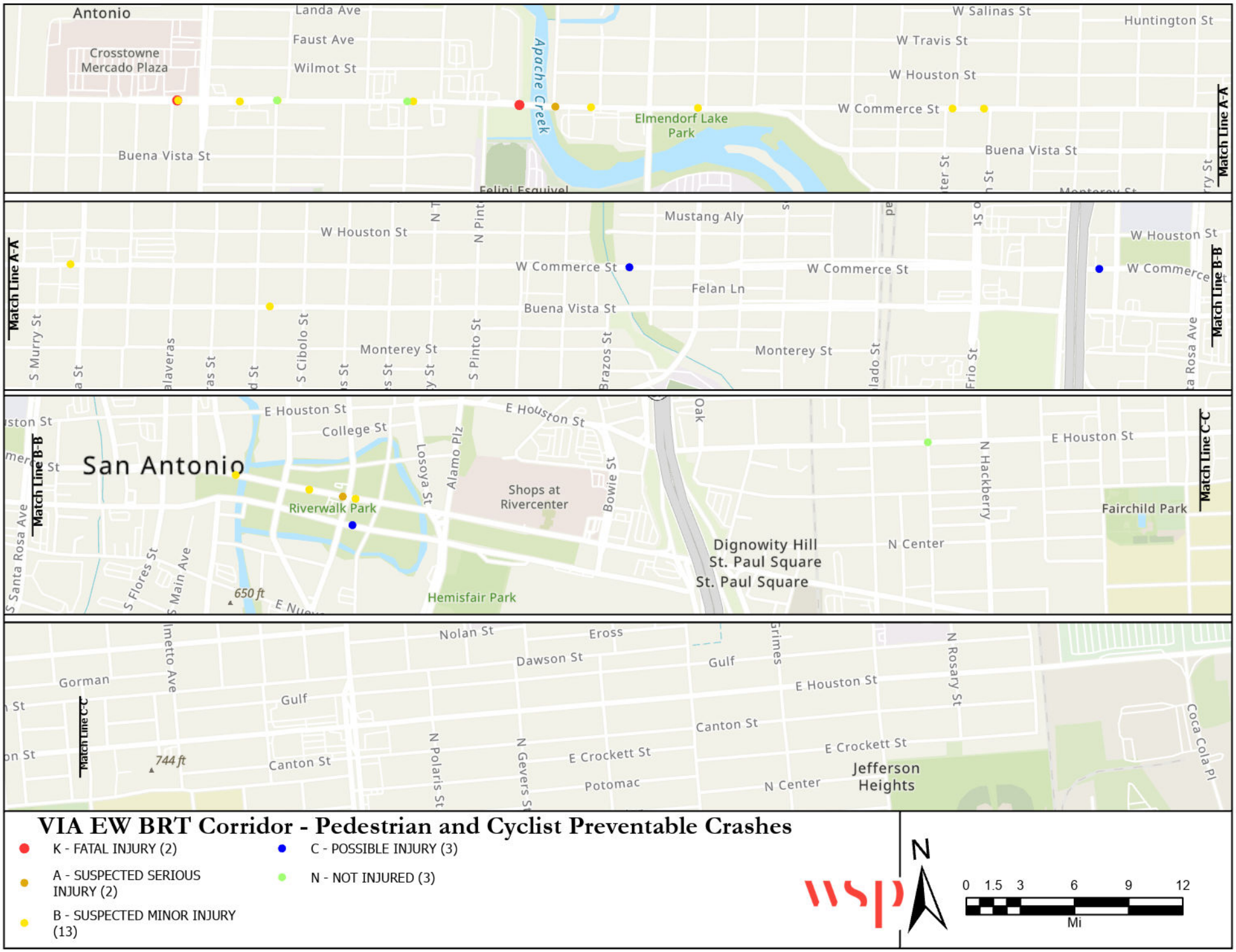
VIA EW BRT Corridor - Preventable Crashes

- K - FATAL INJURY (2)
- A - SUSPECTED SERIOUS INJURY (3)
- B - SUSPECTED MINOR INJURY (20)
- C - POSSIBLE INJURY (16)
- N - NOT INJURED (70)
- 99 - UNKNOWN (2)

N

0 1.5 3 6 9 12

Mi



VIA EW BRT Corridor - Pedestrian and Cyclist Preventable Crashes

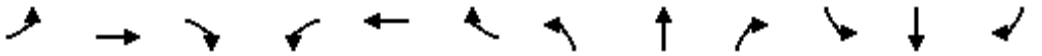
- K - FATAL INJURY (2)
- A - SUSPECTED SERIOUS INJURY (2)
- B - SUSPECTED MINOR INJURY (13)
- C - POSSIBLE INJURY (3)
- N - NOT INJURED (3)

N

0 1.5 3 6 9 12

Mi

F. SYNCHRO REPORTS

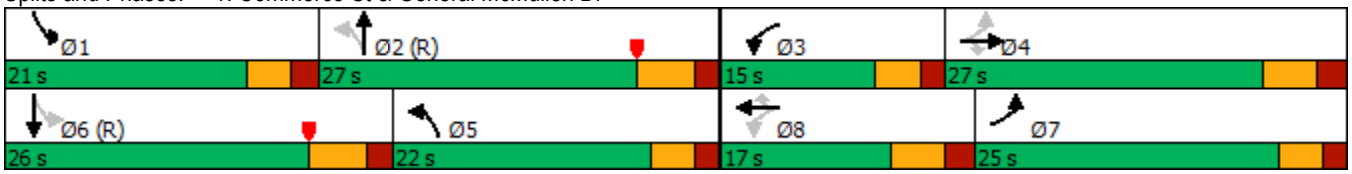


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	266	541	203	115	320	97	261	898	164	147	645	156
Future Volume (vph)	266	541	203	115	320	97	261	898	164	147	645	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	220		220	240		240	230		0	220		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	4968	0	1770	4938	0
Flt Permitted							0.460			0.513		
Satd. Flow (perm)	1863	3539	1583	1863	3539	1583	857	4968	0	956	4938	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			221			160		39			60	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		692			1303			879			693	
Travel Time (s)		15.7			29.6			20.0			15.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	289	588	221	125	348	105	284	1154	0	160	871	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	6.0	6.0	3.0	6.0	6.0	3.0	10.0		3.0	10.0	
Minimum Split (s)	18.0	19.0	19.0	13.0	14.0	14.0	17.0	19.0		16.0	18.0	
Total Split (s)	25.0	27.0	27.0	15.0	17.0	17.0	22.0	27.0		21.0	26.0	
Total Split (%)	27.8%	30.0%	30.0%	16.7%	18.9%	18.9%	24.4%	30.0%		23.3%	28.9%	
Yellow Time (s)	3.0	3.6	3.6	3.0	3.6	3.6	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.7	2.1	2.1	1.7	2.1	2.1	1.8	1.8		1.8	1.8	
Lost Time Adjust (s)	-0.7	-1.7	-1.7	-0.7	-1.7	-1.7	-0.8	-1.7		-0.8	-1.7	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	Max	Max	Max	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	25.5	25.5	25.5	12.3	12.3	12.3	28.1	28.1		19.9	19.9	
Actuated g/C Ratio	0.28	0.28	0.28	0.14	0.14	0.14	0.31	0.31		0.22	0.22	
v/c Ratio	0.55	0.59	0.36	0.49	0.72	0.30	0.61	0.73		0.51	0.76	
Control Delay	33.0	31.3	5.8	43.1	46.3	5.2	35.9	30.6		35.6	35.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	33.0	31.3	5.8	43.1	46.3	5.2	35.9	30.6		35.6	35.2	
LOS	C	C	A	D	D	A	D	C		D	D	
Approach Delay		26.6			38.1			31.6			35.3	
Approach LOS		C			D			C			D	
Queue Length 50th (ft)	143	154	0	66	100	0	129	202		77	157	
Queue Length 95th (ft)	229	214	54	112	132	20	#227	#279		133	199	
Internal Link Dist (ft)		612			1223			799			613	
Turn Bay Length (ft)	220		220	240		240	230			220		
Base Capacity (vph)	527	1001	606	258	511	365	464	1577		368	1252	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.55	0.59	0.36	0.48	0.68	0.29	0.61	0.73		0.43	0.70	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow, Master Intersection			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 32.1		Intersection LOS: C	
Intersection Capacity Utilization 67.3%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Commerce St & General McMullen Dr

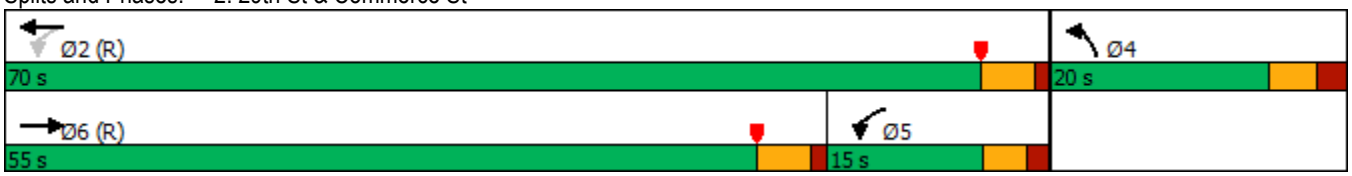


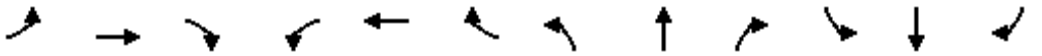
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	849	15	22	536	2	33
Future Volume (vph)	849	15	22	536	2	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	150		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Satd. Flow (prot)	3529	0	1770	3539	1619	0
Flt Permitted			0.295		0.997	
Satd. Flow (perm)	3529	0	550	3539	1619	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	3				36	
Link Speed (mph)	30			30	30	
Link Distance (ft)	1303			798	530	
Travel Time (s)	29.6			18.1	12.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	939	0	24	583	38	0
Turn Type	NA		pm+pt	NA	Prot	
Protected Phases	6		5	2	4	
Permitted Phases			2			
Detector Phase	6		5	2	4	
Switch Phase						
Minimum Initial (s)	10.0		3.0	10.0	3.0	
Minimum Split (s)	25.0		13.0	25.0	15.0	
Total Split (s)	55.0		15.0	70.0	20.0	
Total Split (%)	61.1%		16.7%	77.8%	22.2%	
Yellow Time (s)	3.6		3.0	3.6	3.2	
All-Red Time (s)	1.0		1.5	1.0	2.1	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.6		4.5	4.6	5.3	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Min		None	C-Min	None	
Act Effct Green (s)	78.0		80.0	81.1	4.3	
Actuated g/C Ratio	0.87		0.89	0.90	0.05	
v/c Ratio	0.31		0.05	0.18	0.34	
Control Delay	8.1		1.4	1.2	23.3	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	8.1		1.4	1.2	23.3	
LOS	A		A	A	C	
Approach Delay	8.1			1.2	23.3	
Approach LOS	A			A	C	
Queue Length 50th (ft)	174		1	19	1	
Queue Length 95th (ft)	284		5	35	31	
Internal Link Dist (ft)	1223			718	450	
Turn Bay Length (ft)			150			
Base Capacity (vph)	3057		655	3190	294	
Starvation Cap Reductn	0		0	0	0	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Spillback Cap Reductn	0		0	0	0	
Storage Cap Reductn	0		0	0	0	
Reduced v/c Ratio	0.31		0.04	0.18	0.13	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 15 (17%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 5.8		Intersection LOS: A	
Intersection Capacity Utilization 35.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: 29th St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	779	2	4	454	92	0	0	0	77	4	55
Future Volume (vph)	99	779	2	4	454	92	0	0	0	77	4	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	150		0	0		0	150		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	0	1770	3451	0	0	0	0	1770	1473	0
Flt Permitted	0.399			0.333						0.950		
Satd. Flow (perm)	743	3539	0	620	3451	0	0	0	0	1638	1473	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					31						60	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		798			1731			484			302	
Travel Time (s)		18.1			39.3			11.0			6.9	
Confl. Peds. (#/hr)							30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	849	0	4	593	0	0	0	0	84	64	0
Turn Type	pm+pt	NA		pm+pt	NA					Perm	NA	
Protected Phases	1	6		5	2						8	
Permitted Phases	6			2						8		
Detector Phase	1	6		5	2					8	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0		5.0	10.0					6.0	6.0	
Minimum Split (s)	15.0	25.0		9.0	25.0					18.0	18.0	
Total Split (s)	25.0	65.0		9.0	40.0					25.0	25.0	
Total Split (%)	25.3%	65.7%		9.1%	40.4%					25.3%	25.3%	
Yellow Time (s)	3.0	3.6		3.5	3.6					3.2	3.2	
All-Red Time (s)	1.2	1.0		0.5	1.0					2.1	2.1	
Lost Time Adjust (s)	-0.2	-0.6		-0.6	-0.6					-1.3	-1.3	
Total Lost Time (s)	4.0	4.0		3.4	4.0					4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min					None	None	
Act Effct Green (s)	82.4	81.9		80.9	74.2					10.2	10.2	
Actuated g/C Ratio	0.83	0.83		0.82	0.75					0.10	0.10	
v/c Ratio	0.16	0.29		0.01	0.23					0.50	0.31	
Control Delay	2.6	3.4		2.2	4.5					51.7	15.9	
Queue Delay	0.0	0.0		0.0	0.0					0.0	0.0	
Total Delay	2.6	3.4		2.2	4.5					51.7	15.9	
LOS	A	A		A	A					D	B	
Approach Delay		3.3			4.5						36.2	
Approach LOS		A			A						D	
Queue Length 50th (ft)	9	48		0	50					51	2	
Queue Length 95th (ft)	24	135		2	88					96	40	
Internal Link Dist (ft)		718			1651			404			222	
Turn Bay Length (ft)	130			150						150		
Base Capacity (vph)	841	2929		578	2593					347	359	

Lane Group	Ø4
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	4
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	18.0
Total Split (s)	25.0
Total Split (%)	25%
Yellow Time (s)	3.2
All-Red Time (s)	2.1
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0					0	0	
Spillback Cap Reductn	0	0		0	0					0	0	
Storage Cap Reductn	0	0		0	0					0	0	
Reduced v/c Ratio	0.13	0.29		0.01	0.23					0.24	0.18	

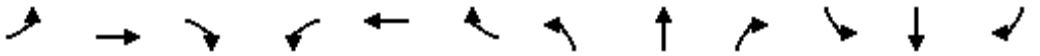
Intersection Summary			
Area Type:	Other		
Cycle Length: 99			
Actuated Cycle Length: 99			
Offset: 25 (25%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 6.6		Intersection LOS: A	
Intersection Capacity Utilization 44.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Matyear St & Commerce St



Lane Group	Ø4
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

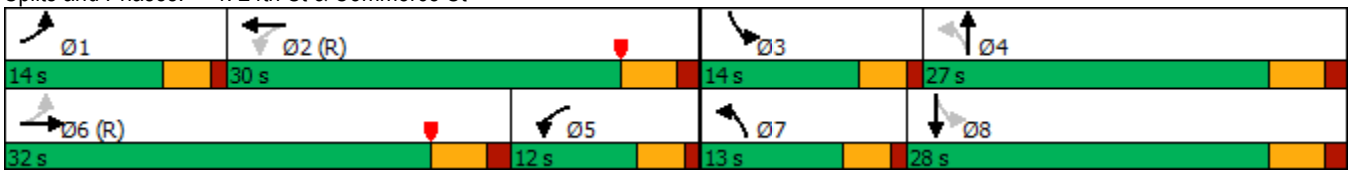


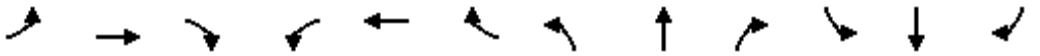
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	500	105	57	324	69	83	333	57	81	261	118
Future Volume (vph)	219	500	105	57	324	69	83	333	57	81	261	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	150		0	150		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3418	0	1770	3417	0	1770	3436	0	1770	3321	0
Flt Permitted	0.394			0.402			0.297			0.296		
Satd. Flow (perm)	722	3418	0	737	3417	0	542	3436	0	541	3321	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			31			22			85	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1731			463			490			331	
Travel Time (s)		39.3			10.5			11.1			7.5	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	238	657	0	62	427	0	90	424	0	88	412	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0		3.0	6.0		3.0	6.0	
Minimum Split (s)	12.0	22.0		10.0	21.0		11.0	19.0		12.0	20.0	
Total Split (s)	14.0	32.0		12.0	30.0		13.0	27.0		14.0	28.0	
Total Split (%)	16.5%	37.6%		14.1%	35.3%		15.3%	31.8%		16.5%	32.9%	
Yellow Time (s)	3.0	3.6		3.0	3.6		3.0	3.6		3.0	3.6	
All-Red Time (s)	1.0	1.5		1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	-1.1		0.0	-1.1		0.0	-1.1		0.0	-1.1	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	45.2	45.2		38.7	38.7		20.0	14.6		20.0	14.6	
Actuated g/C Ratio	0.53	0.53		0.46	0.46		0.24	0.17		0.24	0.17	
v/c Ratio	0.46	0.36		0.15	0.27		0.42	0.70		0.41	0.64	
Control Delay	16.5	13.7		20.6	16.5		27.1	37.5		26.9	30.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	16.5	13.7		20.6	16.5		27.1	37.5		26.9	30.3	
LOS	B	B		C	B		C	D		C	C	
Approach Delay		14.4			17.0			35.6			29.7	
Approach LOS		B			B			D			C	
Queue Length 50th (ft)	72	106		19	70		36	107		35	85	
Queue Length 95th (ft)	135	165		52	127		64	146		62	125	
Internal Link Dist (ft)		1651			383			410			251	
Turn Bay Length (ft)	160			150			150			100		
Base Capacity (vph)	534	1830		444	1571		268	945		286	998	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.45	0.36		0.14	0.27		0.34	0.45		0.31	0.41	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 5 (6%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 22.7		Intersection LOS: C	
Intersection Capacity Utilization 61.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 4: 24th St & Commerce St





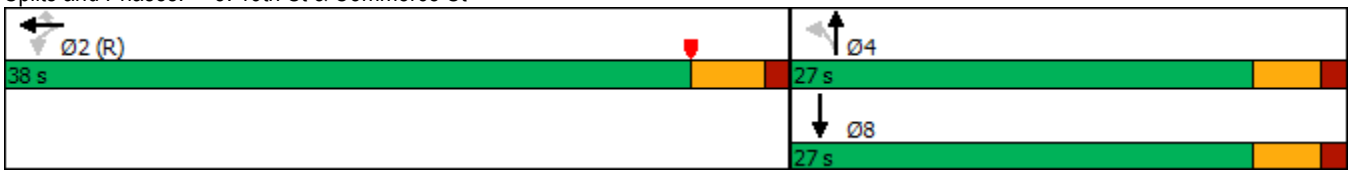
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	27	495	21	16	50	0	0	59	8
Future Volume (vph)	0	0	0	27	495	21	16	50	0	0	59	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		130	150		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	3529	1583	1770	1863	0	0	1831	0
Flt Permitted					0.997		0.816					
Satd. Flow (perm)	0	0	0	0	3519	1468	1520	1863	0	0	1831	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						27					9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		383			1482			392			323	
Travel Time (s)		8.7			33.7			8.9			7.3	
Confl. Peds. (#/hr)				30		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	567	23	17	54	0	0	73	0
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				25.0	25.0	25.0	19.0	19.0			19.0	
Total Split (s)				38.0	38.0	38.0	27.0	27.0			27.0	
Total Split (%)				58.5%	58.5%	58.5%	41.5%	41.5%			41.5%	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.8	-0.8	-0.6	-0.6			-0.6	
Total Lost Time (s)					4.0	4.0	4.0	4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Min	C-Min	C-Min	None	None			None	
Act Effct Green (s)					55.5	55.5	7.3	7.3			7.3	
Actuated g/C Ratio					0.85	0.85	0.11	0.11			0.11	
v/c Ratio					0.19	0.02	0.10	0.26			0.34	
Control Delay					4.2	3.8	24.6	27.1			28.2	
Queue Delay					0.0	0.0	0.0	0.0			0.0	
Total Delay					4.2	3.8	24.6	27.1			28.2	
LOS					A	A	C	C			C	
Approach Delay					4.2			26.5			28.2	
Approach LOS					A			C			C	
Queue Length 50th (ft)					39	0	7	22			24	
Queue Length 95th (ft)					78	0	m23	53			57	
Internal Link Dist (ft)		303			1402			312			243	
Turn Bay Length (ft)						130	150					
Base Capacity (vph)					3005	1258	537	659			653	

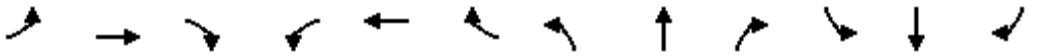
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0	0	0			0	
Spillback Cap Reductn					0	0	0	0			0	
Storage Cap Reductn					0	0	0	0			0	
Reduced v/c Ratio					0.19	0.02	0.03	0.08			0.11	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 25 (38%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 8.7		Intersection LOS: A	
Intersection Capacity Utilization 29.2%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: 19th St & Commerce St



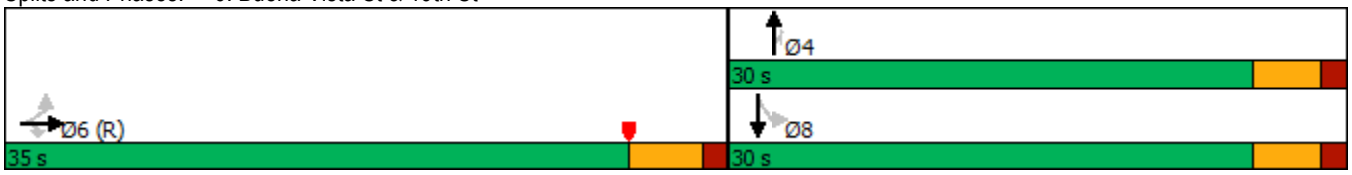


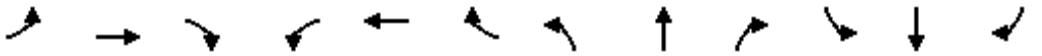
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	540	24	0	0	0	0	38	43	23	39	0
Future Volume (vph)	5	540	24	0	0	0	0	38	43	23	39	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	150		0
Storage Lanes	0		1	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	1583	0	0	0	0	1863	1583	0	1829	0
Flt Permitted											0.920	
Satd. Flow (perm)	0	3538	1583	0	0	0	0	1863	1583	0	1714	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			27						47			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		532			1485			389			392	
Travel Time (s)		12.1			33.8			8.8			8.9	
Confl. Peds. (#/hr)	30											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	592	26	0	0	0	0	41	47	0	67	0
Turn Type	Perm	NA	Perm					NA	Perm	Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6						4	8		
Detector Phase	6	6	6					4	4	8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					6.0	6.0	6.0	6.0	
Minimum Split (s)	25.0	25.0	25.0					16.0	16.0	16.0	16.0	
Total Split (s)	35.0	35.0	35.0					30.0	30.0	30.0	30.0	
Total Split (%)	53.8%	53.8%	53.8%					46.2%	46.2%	46.2%	46.2%	
Yellow Time (s)	3.6	3.6	3.6					3.2	3.2	3.2	3.2	
All-Red Time (s)	1.2	1.2	1.2					1.4	1.4	1.4	1.4	
Lost Time Adjust (s)		-0.8	-0.8					-0.6	0.0		-0.6	
Total Lost Time (s)		4.0	4.0					4.0	4.6		4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max	C-Max					Max	Max	Max	Max	
Act Effct Green (s)		31.0	31.0					26.0	25.4		26.0	
Actuated g/C Ratio		0.48	0.48					0.40	0.39		0.40	
v/c Ratio		0.35	0.03					0.06	0.07		0.10	
Control Delay		11.4	4.1					12.3	4.8		20.9	
Queue Delay		0.0	0.0					0.0	0.0		0.0	
Total Delay		11.4	4.1					12.3	4.8		20.9	
LOS		B	A					B	A		C	
Approach Delay		11.1						8.3			20.9	
Approach LOS		B						A			C	
Queue Length 50th (ft)		72	0					10	0		28	
Queue Length 95th (ft)		106	11					26	17		65	
Internal Link Dist (ft)		452			1405			309			312	
Turn Bay Length (ft)			150									
Base Capacity (vph)		1687	769					745	647		685	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0	0		0	
Spillback Cap Reductn		0	0					0	0		0	
Storage Cap Reductn		0	0					0	0		0	
Reduced v/c Ratio		0.35	0.03					0.06	0.07		0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 33 (51%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay: 11.6		Intersection LOS: B	
Intersection Capacity Utilization 35.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: Buena Vista St & 19th St





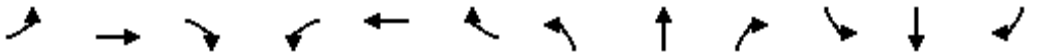
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	27	500	24	21	69	0	0	97	24
Future Volume (vph)	0	0	0	27	500	24	21	69	0	0	97	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		130	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	3529	1583	0	1840	0	0	1812	0
Flt Permitted					0.997			0.926				
Satd. Flow (perm)	0	0	0	0	3529	1583	0	1725	0	0	1812	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						27					19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1482			1455			390			326	
Travel Time (s)		33.7			33.1			8.9			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	572	26	0	98	0	0	131	0
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				25.0	25.0	25.0	17.0	17.0			17.0	
Total Split (s)				42.0	42.0	42.0	23.0	23.0			23.0	
Total Split (%)				64.6%	64.6%	64.6%	35.4%	35.4%			35.4%	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Act Effct Green (s)					38.0	38.0		19.0			19.0	
Actuated g/C Ratio					0.58	0.58		0.29			0.29	
v/c Ratio					0.28	0.03		0.19			0.24	
Control Delay					10.6	3.6		18.4			16.3	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					10.6	3.6		18.4			16.3	
LOS					B	A		B			B	
Approach Delay					10.3			18.4			16.3	
Approach LOS					B			B			B	
Queue Length 50th (ft)					105	3		31			33	
Queue Length 95th (ft)					108	m3		67			72	
Internal Link Dist (ft)		1402			1375			310			246	
Turn Bay Length (ft)						130						
Base Capacity (vph)					2063	936		504			543	
Starvation Cap Reductn					0	0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn					0	0		0			0	
Storage Cap Reductn					0	0		0			0	
Reduced v/c Ratio					0.28	0.03		0.19			0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay: 12.2		Intersection LOS: B	
Intersection Capacity Utilization 36.2%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 7: Hamilton Ave & Commerce St





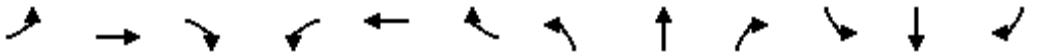
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	613	35	0	0	0	0	32	75	2	11	0
Future Volume (vph)	4	613	35	0	0	0	0	32	75	2	11	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	1583	0	0	0	0	1686	0	0	1850	0
Flt Permitted											0.940	
Satd. Flow (perm)	0	3539	1583	0	0	0	0	1686	0	0	1751	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			38					82				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1485			1230			392			390	
Travel Time (s)		33.8			28.0			8.9			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	670	38	0	0	0	0	117	0	0	14	0
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Detector Phase	6	6	6					4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					6.0		6.0	6.0	
Minimum Split (s)	25.0	25.0	25.0					14.0		14.0	14.0	
Total Split (s)	47.0	47.0	47.0					18.0		18.0	18.0	
Total Split (%)	72.3%	72.3%	72.3%					27.7%		27.7%	27.7%	
Yellow Time (s)	3.6	3.6	3.6					3.2		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0					1.4		1.2	1.2	
Lost Time Adjust (s)		0.0	0.0					-0.6			-0.4	
Total Lost Time (s)		4.6	4.6					4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min	C-Min					None		None	None	
Act Effct Green (s)		52.1	52.1					7.3			7.3	
Actuated g/C Ratio		0.80	0.80					0.11			0.11	
v/c Ratio		0.24	0.03					0.45			0.07	
Control Delay		9.6	6.1					16.7			22.1	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		9.6	6.1					16.7			22.1	
LOS		A	A					B			C	
Approach Delay		9.4						16.7			22.1	
Approach LOS		A						B			C	
Queue Length 50th (ft)		111	7					13			5	
Queue Length 95th (ft)		149	23					53			m20	
Internal Link Dist (ft)		1405			1150			312			310	
Turn Bay Length (ft)			150									
Base Capacity (vph)		2839	1277					427			377	
Starvation Cap Reductn		0	0					0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	0					0			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.24	0.03					0.27			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 4 (6%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay: 10.6		Intersection LOS: B	
Intersection Capacity Utilization 30.5%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 8: Buena Vista St & Hamilton Ave



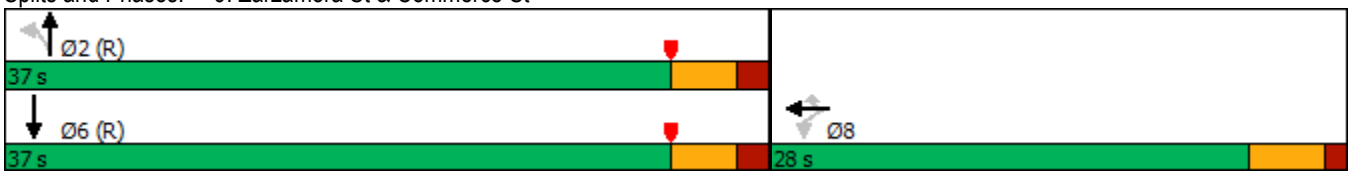


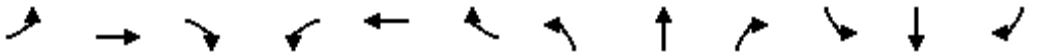
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	122	420	74	74	507	0	0	441	64
Future Volume (vph)	0	0	0	122	420	74	74	507	0	0	441	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	0	3500	1583	0	3518	0	0	3472	0
Flt Permitted					0.989			0.826				
Satd. Flow (perm)	0	0	0	0	3470	1504	0	2923	0	0	3472	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						80					36	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1455			747			389			155	
Travel Time (s)		33.1			17.0			8.8			3.5	
Confl. Peds. (#/hr)				30		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	590	80	0	631	0	0	549	0
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2					
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				6.0	6.0	6.0	10.0	10.0			10.0	
Minimum Split (s)				20.0	20.0	20.0	25.0	25.0			25.0	
Total Split (s)				28.0	28.0	28.0	37.0	37.0			37.0	
Total Split (%)				43.1%	43.1%	43.1%	56.9%	56.9%			56.9%	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.6	1.6			1.6	
Lost Time Adjust (s)					-0.8	-0.8		-0.8			-0.8	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				None	None	None	C-Min	C-Min			C-Min	
Act Effct Green (s)					17.1	17.1		39.9			39.9	
Actuated g/C Ratio					0.26	0.26		0.61			0.61	
v/c Ratio					0.64	0.18		0.35			0.26	
Control Delay					26.8	10.8		5.3			6.4	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					26.8	10.8		5.3			6.4	
LOS					C	B		A			A	
Approach Delay					24.9			5.3			6.4	
Approach LOS					C			A			A	
Queue Length 50th (ft)					126	1		41			42	
Queue Length 95th (ft)					182	47		56			81	
Internal Link Dist (ft)		1375			667			309			75	
Turn Bay Length (ft)												
Base Capacity (vph)					1281	605		1792			2143	
Starvation Cap Reductn					0	0		0			0	
Spillback Cap Reductn					0	0		0			0	
Storage Cap Reductn					0	0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio					0.46	0.13		0.35			0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 60 (92%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 12.7		Intersection LOS: B	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 9: Zarzamora St & Commerce St



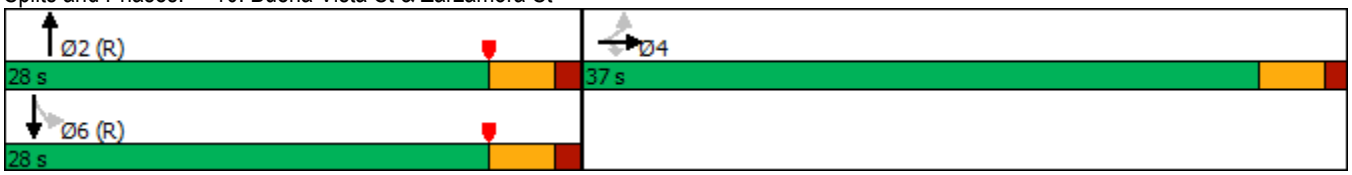


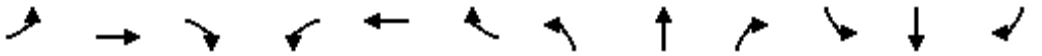
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	533	53	0	0	0	0	407	90	53	365	0
Future Volume (vph)	73	533	53	0	0	0	0	407	90	53	365	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3518	1583	0	0	0	0	3444	0	0	3518	0
Flt Permitted		0.994									0.845	
Satd. Flow (perm)	0	3502	1504	0	0	0	0	3444	0	0	2991	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			58					46				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		220			760			394			389	
Travel Time (s)		5.0			17.3			9.0			8.8	
Confl. Peds. (#/hr)	30		30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	658	58	0	0	0	0	540	0	0	455	0
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4		4							6		
Detector Phase	4	4	4					2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0					10.0		10.0	10.0	
Minimum Split (s)	25.0	25.0	25.0					20.0		20.0	20.0	
Total Split (s)	37.0	37.0	37.0					28.0		28.0	28.0	
Total Split (%)	56.9%	56.9%	56.9%					43.1%		43.1%	43.1%	
Yellow Time (s)	3.2	3.2	3.2					3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2	1.2					1.4		1.4	1.4	
Lost Time Adjust (s)		-0.4	-0.4					-0.6			-0.6	
Total Lost Time (s)		4.0	4.0					4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None					C-Min		C-Min	C-Min	
Act Effct Green (s)		17.1	17.1					39.9			39.9	
Actuated g/C Ratio		0.26	0.26					0.61			0.61	
v/c Ratio		0.72	0.13					0.25			0.25	
Control Delay		31.0	13.2					6.2			5.0	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		31.0	13.2					6.2			5.0	
LOS		C	B					A			A	
Approach Delay		29.5						6.2			5.0	
Approach LOS		C						A			A	
Queue Length 50th (ft)		151	7					39			31	
Queue Length 95th (ft)		186	29					78			53	
Internal Link Dist (ft)		140			680			314			309	
Turn Bay Length (ft)												
Base Capacity (vph)		1777	792					2132			1836	
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					0			0	
Storage Cap Reductn		0	0					0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.37	0.07					0.25			0.25	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 56 (86%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 15.7		Intersection LOS: B	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Buena Vista St & Zarzamora St



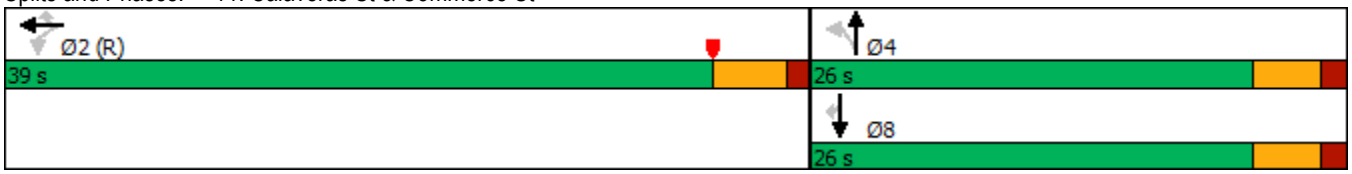


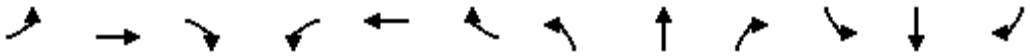
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	11	576	57	8	22	0	0	34	14
Future Volume (vph)	0	0	0	11	576	57	8	22	0	0	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	3536	1583	0	1839	0	0	1863	1583
Flt Permitted					0.999			0.895				
Satd. Flow (perm)	0	0	0	0	3536	1583	0	1667	0	0	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						62						30
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		747			709			390			185	
Travel Time (s)		17.0			16.1			8.9			4.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	638	62	0	33	0	0	37	15
Turn Type				Perm	NA	Perm	Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2		2	4					8
Detector Phase				2	2	2	4	4			8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	6.0
Minimum Split (s)				25.0	25.0	25.0	18.0	18.0			18.0	18.0
Total Split (s)				39.0	39.0	39.0	26.0	26.0			26.0	26.0
Total Split (%)				60.0%	60.0%	60.0%	40.0%	40.0%			40.0%	40.0%
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	3.2
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	1.4
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	0.0
Total Lost Time (s)					4.0	4.0		4.0			4.0	4.6
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Min	C-Min	C-Min	None	None			None	None
Act Effct Green (s)					56.1	56.1		6.8			6.8	6.2
Actuated g/C Ratio					0.86	0.86		0.10			0.10	0.10
v/c Ratio					0.21	0.05		0.19			0.19	0.08
Control Delay					4.7	3.4		37.5			29.1	6.9
Queue Delay					0.0	0.0		0.0			0.0	0.0
Total Delay					4.7	3.4		37.5			29.1	6.9
LOS					A	A		D			C	A
Approach Delay					4.6			37.5			22.7	
Approach LOS					A			D			C	
Queue Length 50th (ft)					68	1		13			14	0
Queue Length 95th (ft)					105	24		m38			38	10
Internal Link Dist (ft)		667			629			310			105	
Turn Bay Length (ft)						150						
Base Capacity (vph)					3050	1374		564			630	541
Starvation Cap Reductn					0	0		0			0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn					0	0		0			0	0
Storage Cap Reductn					0	0		0			0	0
Reduced v/c Ratio					0.21	0.05		0.06			0.06	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 20 (31%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.21			
Intersection Signal Delay: 7.2		Intersection LOS: A	
Intersection Capacity Utilization 36.7%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

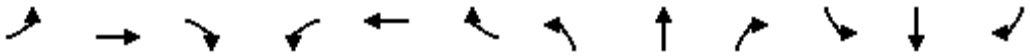
Splits and Phases: 11: Calaveras St & Commerce St





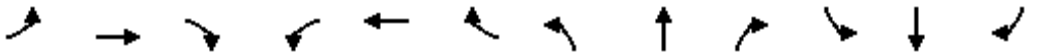
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	684	3	0	0	0	0	6	6	25	6	0
Future Volume (vph)	15	684	3	0	0	0	0	6	6	25	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3532	0	0	0	0	0	1736	0	0	1792	0
Flt Permitted		0.999									0.962	
Satd. Flow (perm)	0	3532	0	0	0	0	0	1736	0	0	1792	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		760			696			281			390	
Travel Time (s)		17.3			15.8			6.4			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	762	0	0	0	0	0	14	0	0	34	0
Sign Control		Free			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.5%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	3	635	0	15	4	0	0	7	4
Future Volume (vph)	0	0	0	3	635	0	15	4	0	0	7	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	0	3539	0	0	1792	0	0	1779	0
Flt Permitted								0.962				
Satd. Flow (perm)	0	0	0	0	3539	0	0	1792	0	0	1779	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		709			1094			391			236	
Travel Time (s)		16.1			24.9			8.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	693	0	0	20	0	0	12	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.0%		ICU Level of Service A	
Analysis Period (min) 15			



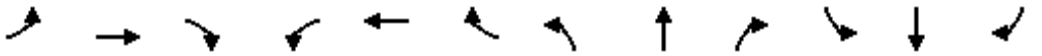
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	766	8	0	0	0	0	1	6	6	4	0
Future Volume (vph)	4	766	8	0	0	0	0	1	6	6	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	1583	0	0	0	0	1643	0	0	1805	0
Flt Permitted											0.886	
Satd. Flow (perm)	0	3539	1583	0	0	0	0	1643	0	0	1650	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			25					7				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		696			1448			392			391	
Travel Time (s)		15.8			32.9			8.9			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	837	9	0	0	0	0	8	0	0	11	0
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Detector Phase	6	6	6					4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					6.0		6.0	6.0	
Minimum Split (s)	25.0	25.0	25.0					13.0		13.0	13.0	
Total Split (s)	49.0	49.0	49.0					16.0		16.0	16.0	
Total Split (%)	75.4%	75.4%	75.4%					24.6%		24.6%	24.6%	
Yellow Time (s)	3.6	3.6	3.6					3.2		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0					1.3		1.3	1.3	
Lost Time Adjust (s)		-0.6	-0.6					-0.5			-0.5	
Total Lost Time (s)		4.0	4.0					4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max	C-Max					Max		Max	Max	
Act Effct Green (s)		45.0	45.0					12.0			12.0	
Actuated g/C Ratio		0.69	0.69					0.18			0.18	
v/c Ratio		0.34	0.01					0.03			0.04	
Control Delay		5.4	0.4					14.6			21.0	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		5.4	0.4					14.6			21.0	
LOS		A	A					B			C	
Approach Delay		5.3						14.6			21.0	
Approach LOS		A						B			C	
Queue Length 50th (ft)		127	0					0			4	
Queue Length 95th (ft)		16	m0					11			m15	
Internal Link Dist (ft)		616			1368			312			311	
Turn Bay Length (ft)			150									
Base Capacity (vph)		2450	1103					309			304	
Starvation Cap Reductn		0	0					0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	0					0			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.34	0.01					0.03			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 1 (2%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 5.6		Intersection LOS: A	
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 14: Navidad St & Buena Vista St



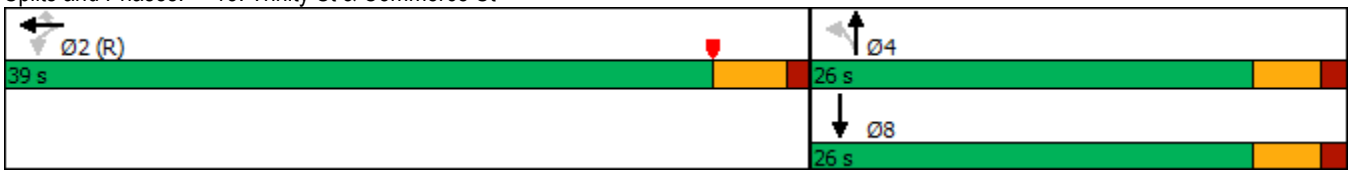


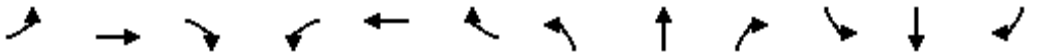
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	46	576	26	38	187	0	0	143	37
Future Volume (vph)	0	0	0	46	576	26	38	187	0	0	143	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	3525	1583	0	1848	0	0	1811	0
Flt Permitted					0.996			0.927				
Satd. Flow (perm)	0	0	0	0	3525	1583	0	1727	0	0	1811	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						28					22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1095			394			321	
Travel Time (s)		8.0			24.9			9.0			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	676	28	0	244	0	0	195	0
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				19.8	19.8	19.8	19.6	19.6			10.6	
Total Split (s)				39.0	39.0	39.0	26.0	26.0			26.0	
Total Split (%)				60.0%	60.0%	60.0%	40.0%	40.0%			40.0%	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Act Effct Green (s)					35.0	35.0		22.0			22.0	
Actuated g/C Ratio					0.54	0.54		0.34			0.34	
v/c Ratio					0.36	0.03		0.42			0.31	
Control Delay					2.7	0.2		19.2			15.7	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					2.7	0.2		19.2			15.7	
LOS					A	A		B			B	
Approach Delay					2.6			19.2			15.7	
Approach LOS					A			B			B	
Queue Length 50th (ft)					14	0		79			49	
Queue Length 95th (ft)					19	0		142			95	
Internal Link Dist (ft)		272			1015			314			241	
Turn Bay Length (ft)						150						
Base Capacity (vph)					1898	865		584			627	
Starvation Cap Reductn					0	0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn					0	0		0			0	
Storage Cap Reductn					0	0		0			0	
Reduced v/c Ratio					0.36	0.03		0.42			0.31	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 43 (66%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 8.4		Intersection LOS: A	
Intersection Capacity Utilization 49.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 15: Trinity St & Commerce St





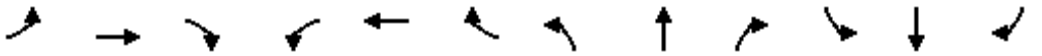
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	722	57	0	0	0	0	66	66	7	34	0
Future Volume (vph)	7	722	57	0	0	0	0	66	66	7	34	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		130	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3536	1583	0	0	0	0	1736	0	0	1846	0
Flt Permitted		0.999									0.881	
Satd. Flow (perm)	0	3536	1457	0	0	0	0	1736	0	0	1641	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			62					72				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1448			1114			389			394	
Travel Time (s)		32.9			25.3			8.8			9.0	
Confl. Peds. (#/hr)			30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	793	62	0	0	0	0	144	0	0	45	0
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Detector Phase	6	6	6					4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					6.0		6.0	6.0	
Minimum Split (s)	25.0	25.0	25.0					17.0		17.0	17.0	
Total Split (s)	42.0	42.0	42.0					23.0		23.0	23.0	
Total Split (%)	64.6%	64.6%	64.6%					35.4%		35.4%	35.4%	
Yellow Time (s)	3.6	3.6	3.6					3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3	1.3					1.4		1.4	1.4	
Lost Time Adjust (s)		-0.9	-0.9					-0.6			-0.6	
Total Lost Time (s)		4.0	4.0					4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Act Effct Green (s)		51.9	51.9					8.0			8.0	
Actuated g/C Ratio		0.80	0.80					0.12			0.12	
v/c Ratio		0.28	0.05					0.52			0.22	
Control Delay		1.0	0.1					21.3			28.0	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		1.0	0.1					21.3			28.0	
LOS		A	A					C			C	
Approach Delay		0.9						21.3			28.0	
Approach LOS		A						C			C	
Queue Length 50th (ft)		9	0					27			18	
Queue Length 95th (ft)		21	1					71			45	
Internal Link Dist (ft)		1368			1034			309			314	
Turn Bay Length (ft)			130									
Base Capacity (vph)		2824	1176					558			479	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					0			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.28	0.05					0.26			0.09	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 21 (32%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 4.9		Intersection LOS: A	
Intersection Capacity Utilization 34.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 16: Buena Vista St & Trinity St





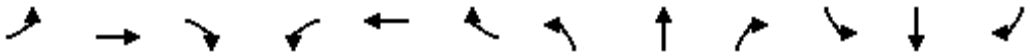
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	5	593	13	7	9	0	0	10	4
Future Volume (vph)	0	0	0	5	593	13	7	9	0	0	10	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	150		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	3539	1583	0	1822	0	0	1796	0
Flt Permitted								0.924				
Satd. Flow (perm)	0	0	0	0	3539	1583	0	1721	0	0	1796	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						27					4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1095			1083			394			323	
Travel Time (s)		24.9			24.6			9.0			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	650	14	0	18	0	0	15	0
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				25.0	25.0	25.0	15.0	15.0			15.0	
Total Split (s)				45.0	45.0	45.0	20.0	20.0			20.0	
Total Split (%)				69.2%	69.2%	69.2%	30.8%	30.8%			30.8%	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.0	1.0	1.0	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.6	-0.6		-0.6			-0.6	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Act Effct Green (s)					41.0	41.0		16.0			16.0	
Actuated g/C Ratio					0.63	0.63		0.25			0.25	
v/c Ratio					0.29	0.01		0.04			0.03	
Control Delay					3.9	0.6		15.1			16.6	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					3.9	0.6		15.1			16.6	
LOS					A	A		B			B	
Approach Delay					3.8			15.1			16.6	
Approach LOS					A			B			B	
Queue Length 50th (ft)					28	0		4			3	
Queue Length 95th (ft)					40	m1		15			16	
Internal Link Dist (ft)		1015			1003			314			243	
Turn Bay Length (ft)						150						
Base Capacity (vph)					2232	1008		423			445	
Starvation Cap Reductn					0	0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn					0	0		0			0	
Storage Cap Reductn					0	0		0			0	
Reduced v/c Ratio					0.29	0.01		0.04			0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 26 (40%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay: 4.4		Intersection LOS: A	
Intersection Capacity Utilization 29.9%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

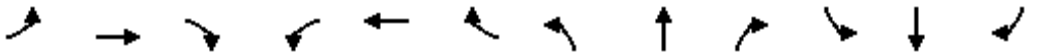
Splits and Phases: 17: Las Moras St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	780	4	0	0	0	0	0	6	19	3	0
Future Volume (vph)	7	780	4	0	0	0	0	0	6	19	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3536	0	0	0	0	0	1611	0	0	1785	0
Flt Permitted											0.958	
Satd. Flow (perm)	0	3536	0	0	0	0	0	1611	0	0	1785	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1114			1066			238			394	
Travel Time (s)		25.3			24.2			5.4			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	860	0	0	0	0	0	7	0	0	24	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.4%		ICU Level of Service A	
Analysis Period (min) 15			

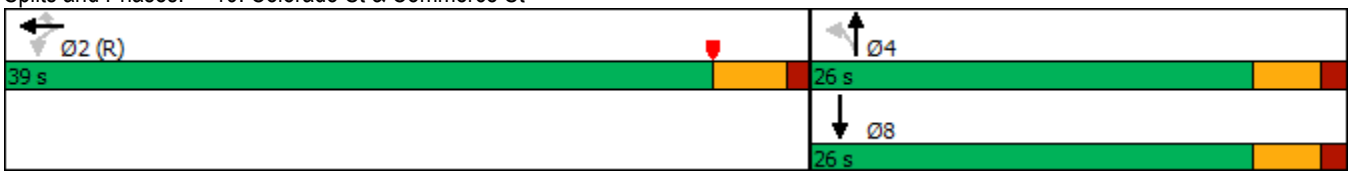


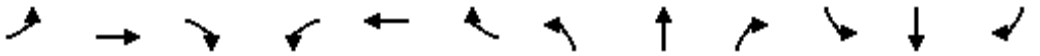
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	93	514	50	37	401	0	0	313	100
Future Volume (vph)	0	0	0	93	514	50	37	401	0	0	313	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	0	3511	1583	0	3525	0	0	3412	0
Flt Permitted					0.992			0.889				
Satd. Flow (perm)	0	0	0	0	3474	1511	0	3146	0	0	3412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						54					72	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			377			390			320	
Travel Time (s)		24.6			8.6			8.9			7.3	
Confl. Peds. (#/hr)				60		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	660	54	0	476	0	0	449	0
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				25.0	25.0	25.0	18.0	18.0			18.0	
Total Split (s)				39.0	39.0	39.0	26.0	26.0			26.0	
Total Split (%)				60.0%	60.0%	60.0%	40.0%	40.0%			40.0%	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max	C-Max	Max	Max			None	
Act Effct Green (s)					35.0	35.0		22.0			22.0	
Actuated g/C Ratio					0.54	0.54		0.34			0.34	
v/c Ratio					0.35	0.06		0.45			0.37	
Control Delay					9.2	2.6		15.0			14.6	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					9.2	2.6		15.0			14.6	
LOS					A	A		B			B	
Approach Delay					8.7			15.0			14.6	
Approach LOS					A			B			B	
Queue Length 50th (ft)					71	0		66			57	
Queue Length 95th (ft)					103	13		92			92	
Internal Link Dist (ft)		1003			297			310			240	
Turn Bay Length (ft)												
Base Capacity (vph)					1870	838		1064			1202	
Starvation Cap Reductn					0	0		0			0	
Spillback Cap Reductn					0	0		0			0	
Storage Cap Reductn					0	0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio					0.35	0.06		0.45			0.37	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 63 (97%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay: 12.2		Intersection LOS: B	
Intersection Capacity Utilization 50.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 19: Colorado St & Commerce St



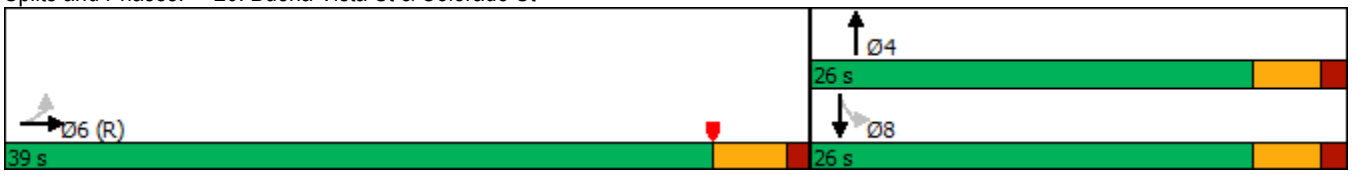


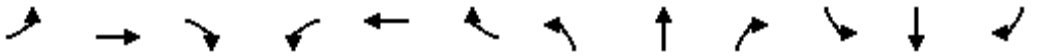
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	643	10	0	0	0	0	192	52	42	152	0
Future Volume (vph)	160	643	10	0	0	0	0	192	52	42	152	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	5022	0	0	0	0	0	3426	0	0	3500	0
Flt Permitted		0.990									0.851	
Satd. Flow (perm)	0	4957	0	0	0	0	0	3426	0	0	3012	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4						57				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1066			378			360			390	
Travel Time (s)		24.2			8.6			8.2			8.9	
Confl. Peds. (#/hr)	60		30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	884	0	0	0	0	0	266	0	0	211	0
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	25.0	25.0						18.0		18.0	18.0	
Total Split (s)	39.0	39.0						26.0		26.0	26.0	
Total Split (%)	60.0%	60.0%						40.0%		40.0%	40.0%	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2						1.4		1.4	1.4	
Lost Time Adjust (s)		-0.8						-0.6			-0.6	
Total Lost Time (s)		4.0						4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max						Max		None	None	
Act Effct Green (s)		35.0						22.0			22.0	
Actuated g/C Ratio		0.54						0.34			0.34	
v/c Ratio		0.33						0.22			0.21	
Control Delay		3.4						12.5			10.3	
Queue Delay		0.0						0.0			0.0	
Total Delay		3.4						12.5			10.3	
LOS		A						B			B	
Approach Delay		3.4						12.5			10.3	
Approach LOS		A						B			B	
Queue Length 50th (ft)		23						30			17	
Queue Length 95th (ft)		28						54			28	
Internal Link Dist (ft)		986			298			280			310	
Turn Bay Length (ft)												
Base Capacity (vph)		2671						1197			1019	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.33						0.22			0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 63 (97%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay: 6.3		Intersection LOS: A	
Intersection Capacity Utilization 38.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 20: Buena Vista St & Colorado St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	23	20	476	32	252	728	0	0	158	150
Future Volume (vph)	0	0	23	20	476	32	252	728	0	0	158	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		1	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	1611	0	3532	1583	1770	3539	0	0	3281	0
Flt Permitted					0.998		0.336					
Satd. Flow (perm)	0	0	1611	0	3532	1583	626	3539	0	0	3281	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			997			100					163	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1809			501			387			300	
Travel Time (s)		41.1			11.4			8.8			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	25	0	539	35	274	791	0	0	335	0
Turn Type			Perm	Perm	NA	Perm	D.P+P	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases			4	2		2	8					
Detector Phase			4	2	2	2	7	4			8	
Switch Phase												
Minimum Initial (s)			10.0	10.0	10.0	10.0	3.0	10.0			10.0	
Minimum Split (s)			20.0	20.0	20.0	20.0	15.0	20.0			20.0	
Total Split (s)			65.0	35.0	35.0	35.0	29.0	65.0			36.0	
Total Split (%)			65.0%	35.0%	35.0%	35.0%	29.0%	65.0%			36.0%	
Yellow Time (s)			3.6	3.6	3.6	3.6	3.0	3.6			3.6	
All-Red Time (s)			2.5	1.7	1.7	1.7	2.0	2.5			2.5	
Lost Time Adjust (s)			0.0		-1.3	0.0	-1.0	-2.1			-2.1	
Total Lost Time (s)			6.1		4.0	5.3	4.0	4.0			4.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Recall Mode			None	C-Min	C-Min	C-Min	None	None			None	
Act Effct Green (s)			27.6		62.3	61.0	25.7	29.7			13.0	
Actuated g/C Ratio			0.28		0.62	0.61	0.26	0.30			0.13	
v/c Ratio			0.02		0.24	0.03	0.90	0.75			0.59	
Control Delay			0.0		6.6	1.2	58.5	28.7			25.1	
Queue Delay			0.0		0.0	0.0	0.0	0.0			0.0	
Total Delay			0.0		6.6	1.2	58.5	28.7			25.1	
LOS			A		A	A	E	C			C	
Approach Delay					6.3			36.4			25.1	
Approach LOS					A			D			C	
Queue Length 50th (ft)			0		65	1	123	168			54	
Queue Length 95th (ft)			0		90	0	111	143			96	
Internal Link Dist (ft)		1729			421			307			220	
Turn Bay Length (ft)							100					
Base Capacity (vph)			1358		2200	1004	523	2158			1160	
Starvation Cap Reductn			0		0	0	0	89			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn			0		0	0	0	0			0	
Storage Cap Reductn			0		0	0	0	0			0	
Reduced v/c Ratio			0.02		0.24	0.03	0.52	0.38			0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 7 (7%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 25.4		Intersection LOS: C	
Intersection Capacity Utilization 46.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 21: Frio St & Commerce St



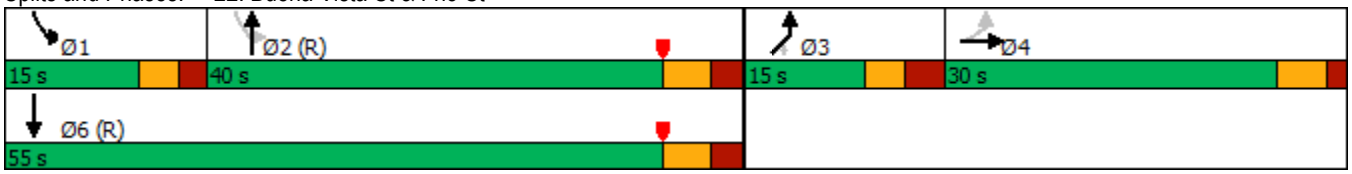


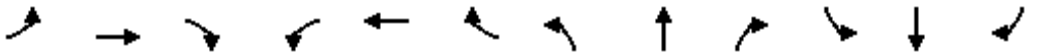
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	SBR2	NEL	NER	NER2
Lane Configurations											
Traffic Volume (vph)	115	387	93	709	48	28	187	53	14	6	5
Future Volume (vph)	115	387	93	709	48	28	187	53	14	6	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		0	100			0	0	
Storage Lanes	0		0		0	1			1	1	
Taper Length (ft)	25					25			25		
Satd. Flow (prot)	0	4919	0	3507	0	1770	3422	0	1709	0	1504
Flt Permitted		0.990				0.282			0.968		
Satd. Flow (perm)	0	4919	0	3507	0	525	3422	0	1709	0	1504
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)				8			91		146		146
Link Speed (mph)		30		30			30		30		
Link Distance (ft)		1797		398			387		431		
Travel Time (s)		40.8		9.0			8.8		9.8		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)											17%
Lane Group Flow (vph)	0	647	0	823	0	30	261	0	23	0	4
Turn Type	Perm	NA		NA		D.P+P	NA		Prot		Perm
Protected Phases		4		2		1	6		3		
Permitted Phases	4					2					3
Detector Phase	4	4		2		1	6		3		3
Switch Phase											
Minimum Initial (s)	14.7	14.7		10.0		3.0	10.0		3.0		3.0
Minimum Split (s)	20.0	20.0		20.0		15.0	20.0		10.0		10.0
Total Split (s)	30.0	30.0		40.0		15.0	55.0		15.0		15.0
Total Split (%)	30.0%	30.0%		40.0%		15.0%	55.0%		15.0%		15.0%
Yellow Time (s)	3.6	3.6		3.6		3.0	3.6		3.0		3.0
All-Red Time (s)	1.7	1.7		2.5		2.0	2.5		3.0		3.0
Lost Time Adjust (s)		-1.3		-2.1		-1.0	-2.1		-1.0		-1.0
Total Lost Time (s)		4.0		4.0		4.0	4.0		5.0		5.0
Lead/Lag	Lag	Lag		Lag		Lead			Lead		Lead
Lead-Lag Optimize?	Yes	Yes		Yes		Yes			Yes		Yes
Recall Mode	None	None		C-Min		None	C-Min		None		None
Act Effct Green (s)		19.7		61.2		64.5	66.9		4.0		4.0
Actuated g/C Ratio		0.20		0.61		0.64	0.67		0.04		0.04
v/c Ratio		0.67		0.38		0.07	0.11		0.11		0.02
Control Delay		40.5		12.5		5.6	2.6		1.1		0.2
Queue Delay		0.0		0.0		0.0	0.0		0.0		0.0
Total Delay		40.5		12.5		5.6	2.6		1.1		0.2
LOS		D		B		A	A		A		A
Approach Delay		40.5		12.5			2.9		1.0		
Approach LOS		D		B			A		A		
Queue Length 50th (ft)		140		154		4	10		0		0
Queue Length 95th (ft)		171		229		13	22		0		0
Internal Link Dist (ft)		1717		318			307		351		
Turn Bay Length (ft)						100					
Base Capacity (vph)		1278		2148		488	2320		302		281
Starvation Cap Reductn		0		0		0	0		0		0

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	SBR2	NEL	NER	NER2
Spillback Cap Reductn		0		0		0	0		0		0
Storage Cap Reductn		0		0		0	0		0		0
Reduced v/c Ratio		0.51		0.38		0.06	0.11		0.08		0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 55 (55%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 20.9		Intersection LOS: C	
Intersection Capacity Utilization 49.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 22: Buena Vista St & Frio St



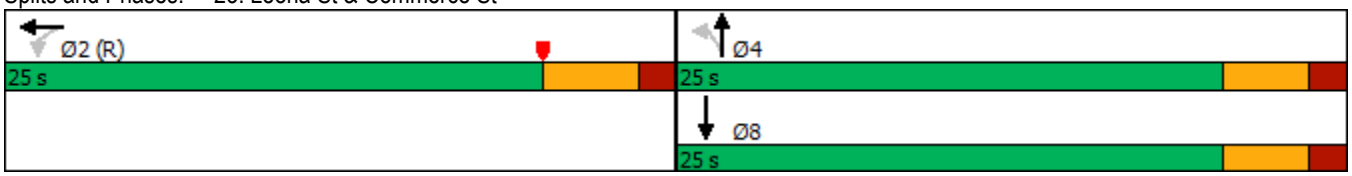


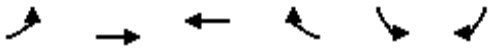
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	593	14	7	20	0	0	1	8
Future Volume (vph)	0	0	0	8	593	14	7	20	0	0	1	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	1770	5070	0	0	1839	0	0	1635	0
Flt Permitted				0.950				0.918				
Satd. Flow (perm)	0	0	0	1304	5070	0	0	1710	0	0	1635	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					8						9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		501			236			383			320	
Travel Time (s)		11.4			5.4			8.7			7.3	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	9	660	0	0	30	0	0	10	0
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0		6.0	6.0			6.0	
Minimum Split (s)				20.0	20.0		12.0	12.0			12.0	
Total Split (s)				25.0	25.0		25.0	25.0			25.0	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Yellow Time (s)				3.6	3.6		3.2	3.2			3.2	
All-Red Time (s)				1.4	1.4		1.5	1.5			1.5	
Lost Time Adjust (s)				-1.0	-1.0			-0.7			-0.7	
Total Lost Time (s)				4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Min	C-Min		Min	Min			Min	
Act Effct Green (s)				35.3	35.3			6.7			6.7	
Actuated g/C Ratio				0.71	0.71			0.13			0.13	
v/c Ratio				0.01	0.18			0.13			0.04	
Control Delay				2.2	3.0			19.9			12.9	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				2.2	3.0			19.9			12.9	
LOS				A	A			B			B	
Approach Delay					3.0			19.9			12.9	
Approach LOS					A			B			B	
Queue Length 50th (ft)				1	25			9			0	
Queue Length 95th (ft)				m2	24			m20			11	
Internal Link Dist (ft)		421			156			303			240	
Turn Bay Length (ft)												
Base Capacity (vph)				920	3581			718			691	
Starvation Cap Reductn				0	0			0			0	
Spillback Cap Reductn				0	0			0			0	
Storage Cap Reductn				0	0			0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio				0.01	0.18			0.04			0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 45 (90%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.18			
Intersection Signal Delay: 3.9		Intersection LOS: A	
Intersection Capacity Utilization 25.6%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

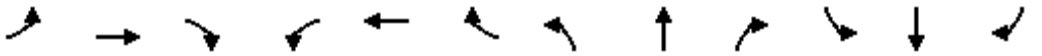
Splits and Phases: 23: Leona St & Commerce St





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	876	0	0	4	0
Future Volume (vph)	7	876	0	0	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		296	192		383	
Travel Time (s)		6.7	4.4		8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	960	0	0	4	0
Sign Control		Free	Free		Stop	

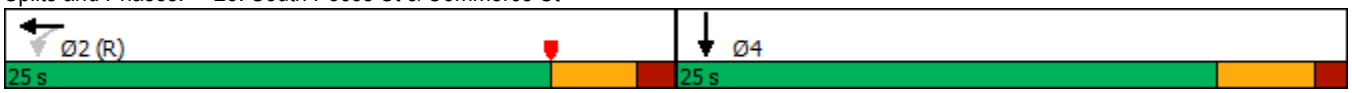
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	27.1%	ICU Level of Service	A
Analysis Period (min)	15		

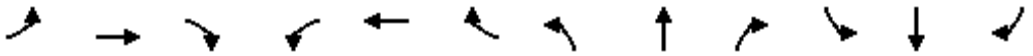


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	93	306	0	0	0	0	0	720	251
Future Volume (vph)	0	0	0	93	306	0	0	0	0	0	720	251
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	1770	5085	0	0	0	0	0	4887	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	5085	0	0	0	0	0	4887	0
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)											219	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		155			387			408			325	
Travel Time (s)		3.5			8.8			9.3			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	101	333	0	0	0	0	0	1056	0
Turn Type				Perm	NA						NA	
Protected Phases					2						4	
Permitted Phases				2								
Detector Phase				2	2						4	
Switch Phase												
Minimum Initial (s)				10.0	10.0						7.1	
Minimum Split (s)				20.0	20.0						12.0	
Total Split (s)				25.0	25.0						25.0	
Total Split (%)				50.0%	50.0%						50.0%	
Yellow Time (s)				3.2	3.2						3.6	
All-Red Time (s)				1.5	1.5						1.3	
Lost Time Adjust (s)				0.0	-0.7						-1.1	
Total Lost Time (s)				4.7	4.0						3.8	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Min	C-Min						Min	
Act Effct Green (s)				26.6	27.3						14.9	
Actuated g/C Ratio				0.53	0.55						0.30	
v/c Ratio				0.11	0.12						0.66	
Control Delay				7.0	4.7						13.6	
Queue Delay				0.0	0.0						0.0	
Total Delay				7.0	4.7						13.6	
LOS				A	A						B	
Approach Delay					5.3						13.6	
Approach LOS					A						B	
Queue Length 50th (ft)				11	9						73	
Queue Length 95th (ft)				42	29						93	
Internal Link Dist (ft)		75			307			328			245	
Turn Bay Length (ft)												
Base Capacity (vph)				943	2780						2198	
Starvation Cap Reductn				0	0						0	
Spillback Cap Reductn				0	0						0	
Storage Cap Reductn				0	0						0	
Reduced v/c Ratio				0.11	0.12						0.48	

Intersection Summary		
Area Type:	Other	
Cycle Length: 50		
Actuated Cycle Length: 50		
Offset: 40 (80%), Referenced to phase 2:WBTL, Start of Yellow		
Natural Cycle: 40		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.66		
Intersection Signal Delay: 11.2		Intersection LOS: B
Intersection Capacity Utilization 35.1%		ICU Level of Service A
Analysis Period (min) 15		

Splits and Phases: 25: South Pecos St & Commerce St

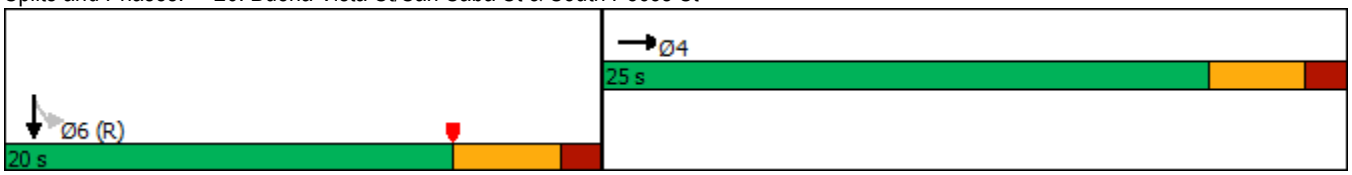


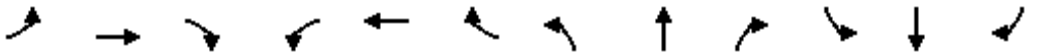


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	634	246	0	0	0	0	0	0	210	468	0
Future Volume (vph)	0	634	246	0	0	0	0	0	0	210	468	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	4872	0	0	0	0	0	0	0	0	6312	0
Flt Permitted											0.985	
Satd. Flow (perm)	0	4872	0	0	0	0	0	0	0	0	6312	0
Right Turn on Red			Yes			Yes			Yes	No		Yes
Satd. Flow (RTOR)		166										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		233			388			389			408	
Travel Time (s)		5.3			8.8			8.8			9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	956	0	0	0	0	0	0	0	0	737	0
Turn Type		NA								Perm	NA	
Protected Phases		4									6	
Permitted Phases										6		
Detector Phase		4								6	6	
Switch Phase												
Minimum Initial (s)		6.0								12.0	12.0	
Minimum Split (s)		12.0								17.0	17.0	
Total Split (s)		25.0								20.0	20.0	
Total Split (%)		55.6%								44.4%	44.4%	
Yellow Time (s)		3.2								3.6	3.6	
All-Red Time (s)		1.5								1.4	1.4	
Lost Time Adjust (s)		-0.7									-1.0	
Total Lost Time (s)		4.0									4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		None								C-Min	C-Min	
Act Effct Green (s)		13.0									24.0	
Actuated g/C Ratio		0.29									0.53	
v/c Ratio		0.63									0.22	
Control Delay		12.9									6.4	
Queue Delay		0.0									0.0	
Total Delay		12.9									6.4	
LOS		B									A	
Approach Delay		12.9									6.4	
Approach LOS		B									A	
Queue Length 50th (ft)		63									24	
Queue Length 95th (ft)		78									48	
Internal Link Dist (ft)		153			308			309			328	
Turn Bay Length (ft)												
Base Capacity (vph)		2362									3371	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.40									0.22	

Intersection Summary		
Area Type:	Other	
Cycle Length: 45		
Actuated Cycle Length: 45		
Offset: 20 (44%), Referenced to phase 6:SBTL, Start of Yellow		
Natural Cycle: 40		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.63		
Intersection Signal Delay: 10.0	Intersection LOS: B	
Intersection Capacity Utilization 36.0%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 26: Buena Vista St/San Saba St & South Pecos St



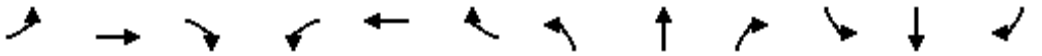


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	388	209	11	89	0	0	0	0
Future Volume (vph)	0	0	0	0	388	209	11	89	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	0	4821	0	0	3522	0	0	0	0
Flt Permitted								0.995				
Satd. Flow (perm)	0	0	0	0	4821	0	0	3522	0	0	0	0
Right Turn on Red			Yes			Yes	No		Yes			Yes
Satd. Flow (RTOR)					227							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		387			563			166			325	
Travel Time (s)		8.8			12.8			3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	649	0	0	109	0	0	0	0
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Detector Phase					2		4	4				
Switch Phase												
Minimum Initial (s)					10.0		5.0	5.0				
Minimum Split (s)					37.7		23.7	23.7				
Total Split (s)					70.0		30.0	30.0				
Total Split (%)					70.0%		30.0%	30.0%				
Yellow Time (s)					3.2		3.2	3.2				
All-Red Time (s)					1.5		1.5	1.5				
Lost Time Adjust (s)					-2.0			-1.7				
Total Lost Time (s)					2.7			3.0				
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode					C-Max		Max	Max				
Act Effct Green (s)					67.3			27.0				
Actuated g/C Ratio					0.67			0.27				
v/c Ratio					0.20			0.11				
Control Delay					6.6			27.2				
Queue Delay					0.0			0.0				
Total Delay					6.6			27.2				
LOS					A			C				
Approach Delay					6.6			27.2				
Approach LOS					A			C				
Queue Length 50th (ft)					0			26				
Queue Length 95th (ft)					35			46				
Internal Link Dist (ft)		307			483			86			245	
Turn Bay Length (ft)												
Base Capacity (vph)					3318			950				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.20			0.11				

Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 85 (85%), Referenced to phase 2:WBT, Start of Yellow		
Natural Cycle: 65		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.20		
Intersection Signal Delay: 9.6	Intersection LOS: A	
Intersection Capacity Utilization 35.1%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 27: San Saba St & Commerce St





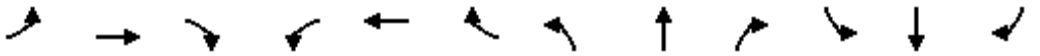
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	124	699	4	0	0	0	0	4	3	0	0	0
Future Volume (vph)	124	699	4	0	0	0	0	4	3	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	0		0
Storage Lanes	1		1	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	5085	1583	0	0	0	0	1863	1583	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1770	5085	1049	0	0	0	0	1863	1583	0	0	0
Right Turn on Red	No		Yes			Yes			No			Yes
Satd. Flow (RTOR)			25									
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		388			565			393			243	
Travel Time (s)		8.8			12.8			8.9			5.5	
Confl. Peds. (#/hr)			200									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	135	760	4	0	0	0	0	4	3	0	0	0
Turn Type	Split	NA	Perm					NA	Perm			
Protected Phases	6	6						4				
Permitted Phases			6						4			
Detector Phase	6	6	6					4	4			
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					6.0	6.0			
Minimum Split (s)	25.0	25.0	25.0					30.3	30.3			
Total Split (s)	65.0	65.0	65.0					35.0	35.0			
Total Split (%)	65.0%	65.0%	65.0%					35.0%	35.0%			
Yellow Time (s)	3.6	3.6	3.6					3.2	3.2			
All-Red Time (s)	1.0	1.0	1.0					2.1	2.1			
Lost Time Adjust (s)	-0.6	-0.6	-0.6					-0.6	-0.6			
Total Lost Time (s)	4.0	4.0	4.0					4.7	4.7			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min	C-Min					None	None			
Act Effct Green (s)	96.9	96.9	96.9					6.6	6.6			
Actuated g/C Ratio	0.97	0.97	0.97					0.07	0.07			
v/c Ratio	0.08	0.15	0.00					0.03	0.03			
Control Delay	0.5	0.4	0.0					44.5	44.3			
Queue Delay	0.0	0.0	0.0					0.0	0.0			
Total Delay	0.5	0.4	0.0					44.5	44.3			
LOS	A	A	A					D	D			
Approach Delay		0.4						44.4				
Approach LOS		A						D				
Queue Length 50th (ft)	0	0	0					2	2			
Queue Length 95th (ft)	17	27	0					14	11			
Internal Link Dist (ft)		308			485			313			163	
Turn Bay Length (ft)	150		150									
Base Capacity (vph)	1716	4929	1018					564	479			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0					0	0			
Spillback Cap Reductn	0	0	0					0	0			
Storage Cap Reductn	0	0	0					0	0			
Reduced v/c Ratio	0.08	0.15	0.00					0.01	0.01			

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.15			
Intersection Signal Delay: 0.8		Intersection LOS: A	
Intersection Capacity Utilization 25.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 28: Dolorosa St & San Saba St



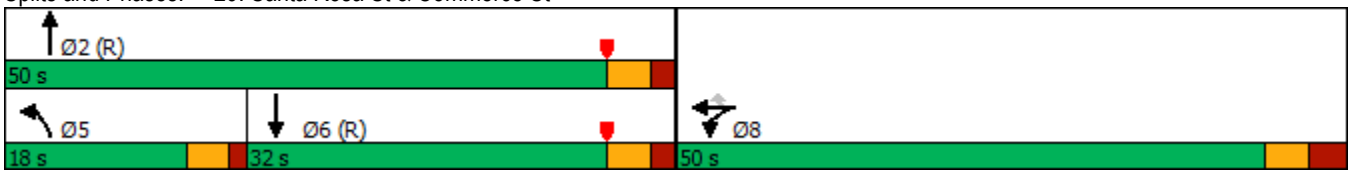


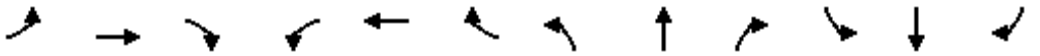
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	41	385	50	175	633	0	0	197	37
Future Volume (vph)	0	0	0	41	385	50	175	633	0	0	197	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		100	150		0	0		0
Storage Lanes	0		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	1770	3539	1583	3433	3539	0	0	4963	0
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	1770	3539	1583	3433	3539	0	0	4963	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						72					38	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			383			374			398	
Travel Time (s)		12.8			8.7			8.5			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	45	418	54	190	688	0	0	254	0
Turn Type				Split	NA	Perm	Prot	NA			NA	
Protected Phases				8	8		5	2			6	
Permitted Phases						8						
Detector Phase				8	8	8	5	2			6	
Switch Phase												
Minimum Initial (s)				5.0	5.0	5.0	3.0	10.0			10.0	
Minimum Split (s)				35.0	35.0	35.0	15.0	35.0			20.0	
Total Split (s)				50.0	50.0	50.0	18.0	50.0			32.0	
Total Split (%)				50.0%	50.0%	50.0%	18.0%	50.0%			32.0%	
Yellow Time (s)				3.2	3.2	3.2	3.0	3.2			3.2	
All-Red Time (s)				3.0	3.0	3.0	1.4	2.0			2.0	
Lost Time Adjust (s)				-2.2	-2.2	-2.2	-0.4	-1.2			-1.2	
Total Lost Time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Recall Mode				Max	Max	Max	Max	C-Max			C-Max	
Act Effct Green (s)				46.0	46.0	46.0	14.0	46.0			28.0	
Actuated g/C Ratio				0.46	0.46	0.46	0.14	0.46			0.28	
v/c Ratio				0.06	0.26	0.07	0.40	0.42			0.18	
Control Delay				20.7	23.3	10.2	51.5	24.7			23.5	
Queue Delay				0.0	0.0	0.0	0.0	0.5			0.0	
Total Delay				20.7	23.3	10.2	51.5	25.2			23.5	
LOS				C	C	B	D	C			C	
Approach Delay					21.7			30.9			23.5	
Approach LOS					C			C			C	
Queue Length 50th (ft)				20	104	1	66	137			38	
Queue Length 95th (ft)				46	150	31	100	203			59	
Internal Link Dist (ft)		483			303			294			318	
Turn Bay Length (ft)						100	150					
Base Capacity (vph)				814	1627	767	480	1627			1417	
Starvation Cap Reductn				0	0	0	0	507			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn				0	0	0	0	0			0	
Storage Cap Reductn				0	0	0	0	0			0	
Reduced v/c Ratio				0.06	0.26	0.07	0.40	0.61			0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 26.9		Intersection LOS: C	
Intersection Capacity Utilization 43.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 29: Santa Rosa St & Commerce St



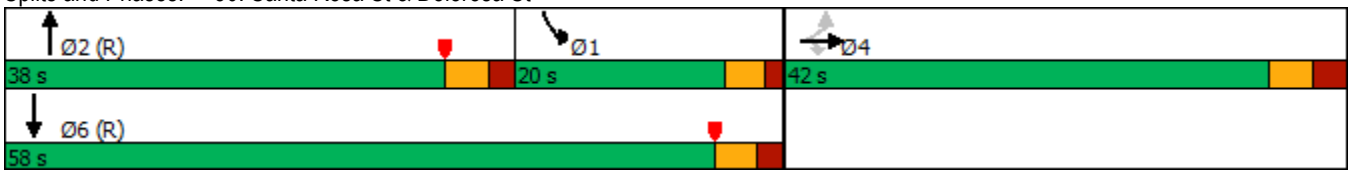


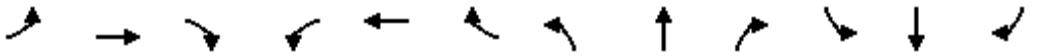
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	515	60	0	0	0	0	850	174	83	173	0
Future Volume (vph)	127	515	60	0	0	0	0	850	174	83	173	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	150		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	5085	1583	0	0	0	0	4958	0	3433	3539	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	5085	1583	0	0	0	0	4958	0	3433	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			81					47				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		565			395			416			374	
Travel Time (s)		12.8			9.0			9.5			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	138	560	65	0	0	0	0	1113	0	90	188	0
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Detector Phase	4	4	4					2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0					10.0		3.0	10.0	
Minimum Split (s)	25.0	25.0	25.0					25.0		15.0	40.0	
Total Split (s)	42.0	42.0	42.0					38.0		20.0	58.0	
Total Split (%)	42.0%	42.0%	42.0%					38.0%		20.0%	58.0%	
Yellow Time (s)	3.2	3.2	3.2					3.2		3.0	3.2	
All-Red Time (s)	2.7	2.7	2.7					2.0		1.4	2.0	
Lost Time Adjust (s)	-1.9	-1.9	-1.9					-1.2		-0.4	-1.2	
Total Lost Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lead/Lag								Lead		Lag		
Lead-Lag Optimize?								Yes		Yes		
Recall Mode	Max	Max	Max					C-Max		Max	C-Max	
Act Effct Green (s)	38.0	38.0	38.0					34.0		16.0	54.0	
Actuated g/C Ratio	0.38	0.38	0.38					0.34		0.16	0.54	
v/c Ratio	0.21	0.29	0.10					0.65		0.16	0.10	
Control Delay	25.4	25.0	7.4					28.8		33.1	3.5	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay	25.4	25.0	7.4					28.8		33.1	3.5	
LOS	C	C	A					C		C	A	
Approach Delay		23.6						28.8			13.1	
Approach LOS		C						C			B	
Queue Length 50th (ft)	58	89	0					208		30	7	
Queue Length 95th (ft)	0	0	35					257		56	8	
Internal Link Dist (ft)		485			315			336			294	
Turn Bay Length (ft)			150							150		
Base Capacity (vph)	672	1932	651					1716		549	1911	
Starvation Cap Reductn	0	0	0					0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.21	0.29	0.10					0.65		0.16	0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 40 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 24.9		Intersection LOS: C	
Intersection Capacity Utilization 43.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 30: Santa Rosa St & Dolorosa St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	28	448	12	11	5	0	0	6	17
Future Volume (vph)	0	0	0	28	448	12	11	5	0	0	6	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	5070	1583	0	1799	0	0	1682	0
Flt Permitted					0.997			0.774				
Satd. Flow (perm)	0	0	0	0	4923	1583	0	1442	0	0	1682	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						19					18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		383			838			405			525	
Travel Time (s)		8.7			19.0			9.2			11.9	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	517	13	0	17	0	0	25	0
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			8			4	
Permitted Phases				2		2	8					
Detector Phase				2	2	2	8	8			4	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	5.0			5.0	
Minimum Split (s)				45.0	45.0	45.0	20.0	20.0			20.0	
Total Split (s)				68.0	68.0	68.0	32.0	32.0			32.0	
Total Split (%)				68.0%	68.0%	68.0%	32.0%	32.0%			32.0%	
Yellow Time (s)				3.2	3.2	3.2	3.2	3.2			3.2	
All-Red Time (s)				1.1	1.1	1.1	1.5	1.5			1.5	
Lost Time Adjust (s)					-0.3	-0.3		-0.7			-0.7	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max	C-Max	Min	Min			Min	
Act Effct Green (s)					86.0	86.0		6.0			6.0	
Actuated g/C Ratio					0.86	0.86		0.06			0.06	
v/c Ratio					0.12	0.01		0.20			0.21	
Control Delay					3.2	2.1		64.3			28.3	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					3.2	2.1		64.3			28.3	
LOS					A	A		E			C	
Approach Delay					3.2			64.3			28.3	
Approach LOS					A			E			C	
Queue Length 50th (ft)					41	0		11			4	
Queue Length 95th (ft)					58	m6		m32			30	
Internal Link Dist (ft)		303			758			325			445	
Turn Bay Length (ft)						150						
Base Capacity (vph)					4231	1363		403			483	

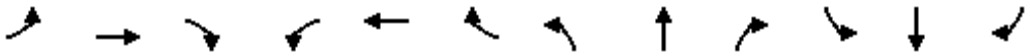
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0		0			0	
Spillback Cap Reductn					0	0		0			0	
Storage Cap Reductn					0	0		0			0	
Reduced v/c Ratio					0.12	0.01		0.04			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 70 (70%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.21			
Intersection Signal Delay: 6.1		Intersection LOS: A	
Intersection Capacity Utilization 23.4%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

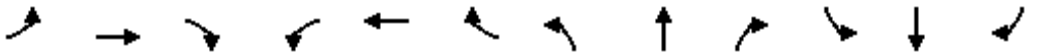
Splits and Phases: 31: Laredo St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	728	34	0	0	0	0	2	7	32	2	0
Future Volume (vph)	10	728	34	0	0	0	0	2	7	32	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	5045	0	0	0	0	0	1662	0	0	1779	0
Flt Permitted		0.999									0.955	
Satd. Flow (perm)	0	5045	0	0	0	0	0	1662	0	0	1779	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		395			843			413			405	
Travel Time (s)		9.0			19.2			9.4			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	839	0	0	0	0	0	10	0	0	37	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.2%		ICU Level of Service A	
Analysis Period (min) 15			



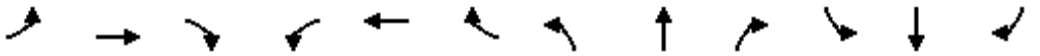
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	182	523	151	55	260	0	0	249	49
Future Volume (vph)	0	0	0	182	523	151	55	260	0	0	249	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	1610	3383	1583	0	3507	0	0	3451	0
Flt Permitted				0.950	0.998			0.775				
Satd. Flow (perm)	0	0	0	1610	3383	1583	0	2743	0	0	3451	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						164					21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		838			265			167			470	
Travel Time (s)		19.0			6.0			3.8			10.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	178	588	164	0	343	0	0	324	0
Turn Type				Perm	NA	Perm	D.P+P	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2		2	8					
Detector Phase				2	2	2	7	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	3.0	10.0			10.0	
Minimum Split (s)				20.0	20.0	20.0	10.0	25.0			15.0	
Total Split (s)				34.0	34.0	34.0	14.0	38.0			24.0	
Total Split (%)				34.0%	34.0%	34.0%	14.0%	38.0%			24.0%	
Yellow Time (s)				3.2	3.2	3.2	3.0	3.2			3.2	
All-Red Time (s)				1.5	1.5	1.5	1.0	1.4			1.4	
Lost Time Adjust (s)				-2.0	-2.0	-2.0		-2.0			-2.0	
Total Lost Time (s)				2.7	2.7	2.7		2.6			2.6	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Recall Mode				C-Max	C-Max	C-Max	Min	Min			Min	
Act Effct Green (s)				72.6	72.6	72.6		22.1			14.6	
Actuated g/C Ratio				0.73	0.73	0.73		0.22			0.15	
v/c Ratio				0.15	0.24	0.14		0.53			0.62	
Control Delay				4.9	5.1	1.1		24.6			42.6	
Queue Delay				1.1	1.0	0.7		0.0			0.0	
Total Delay				6.0	6.1	1.8		24.6			42.6	
LOS				A	A	A		C			D	
Approach Delay					5.3			24.6			42.6	
Approach LOS					A			C			D	
Queue Length 50th (ft)				31	57	0		55			96	
Queue Length 95th (ft)				64	91	18		71			136	
Internal Link Dist (ft)		758			185			87			390	
Turn Bay Length (ft)												
Base Capacity (vph)				1168	2455	1193		1008			755	
Starvation Cap Reductn				781	1550	772		0			0	
Spillback Cap Reductn				0	0	0		0			0	
Storage Cap Reductn				0	0	0		0			0	
Reduced v/c Ratio				0.46	0.65	0.39		0.34			0.43	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	20.0
Total Split (s)	28.0
Total Split (%)	28%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 22 (22%), Referenced to phase 2:WBTL, Start of Yellow		
Natural Cycle: 65		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.62		
Intersection Signal Delay: 17.0	Intersection LOS: B	
Intersection Capacity Utilization 41.7%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 33: Commerce St & Military Plaza





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	512	183	0	0	0	0	279	56	90	346	0
Future Volume (vph)	47	512	183	0	0	0	0	279	56	90	346	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	130		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	5065	1583	0	0	0	0	3451	0	1770	3539	0
Flt Permitted		0.996								0.495		
Satd. Flow (perm)	0	5065	1583	0	0	0	0	3451	0	922	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			199					21				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		843			462			543			226	
Travel Time (s)		19.2			10.5			12.3			5.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	608	199	0	0	0	0	364	0	98	376	0
Turn Type	Perm	NA	Perm					NA		D.P+P	NA	
Protected Phases		2 10						4		3	8	
Permitted Phases	2 10		2 10							4		
Detector Phase	2 10	2 10	2 10					4		3	8	
Switch Phase												
Minimum Initial (s)								10.0		3.0	10.0	
Minimum Split (s)								15.0		10.0	25.0	
Total Split (s)								24.0		14.0	38.0	
Total Split (%)								24.0%		14.0%	38.0%	
Yellow Time (s)								3.2		3.0	3.2	
All-Red Time (s)								1.6		1.2	1.6	
Lost Time Adjust (s)								-0.8		-0.2	-0.8	
Total Lost Time (s)								4.0		4.0	4.0	
Lead/Lag								Lead		Lag		
Lead-Lag Optimize?								Yes		Yes		
Recall Mode								Max		Max	Max	
Act Effct Green (s)		36.8	35.8					41.2		51.2	55.2	
Actuated g/C Ratio		0.37	0.36					0.41		0.51	0.55	
v/c Ratio		0.33	0.29					0.25		0.18	0.19	
Control Delay		14.6	1.8					18.9		5.9	5.2	
Queue Delay		0.0	0.0					0.0		0.0	0.0	
Total Delay		14.6	1.8					18.9		5.9	5.2	
LOS		B	A					B		A	A	
Approach Delay		11.4						18.9			5.4	
Approach LOS		B						B			A	
Queue Length 50th (ft)		56	0					73		13	26	
Queue Length 95th (ft)		67	7					110		24	36	
Internal Link Dist (ft)		763			382			463			146	
Turn Bay Length (ft)			150							130		
Base Capacity (vph)		2937	987					1434		557	1953	
Starvation Cap Reductn		0	0					0		0	0	

Lane Group	Ø2	Ø10
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	10
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	10.0	3.0
Minimum Split (s)	20.0	25.0
Total Split (s)	32.0	30.0
Total Split (%)	32%	30%
Yellow Time (s)	3.2	3.0
All-Red Time (s)	1.8	1.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Recall Mode	C-Max	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	0					0		0	0	
Storage Cap Reductn		0	0					0		0	0	
Reduced v/c Ratio		0.21	0.20					0.25		0.18	0.19	

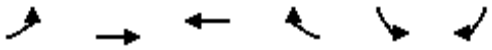
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 18 (18%), Referenced to phase 2:EBTL, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay: 11.3		Intersection LOS: B	
Intersection Capacity Utilization 35.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 34: Flores St & Dolorosa St

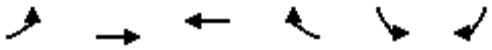


Lane Group	Ø2	Ø10
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary



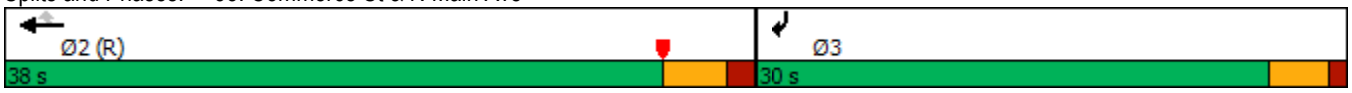
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑	↱		↱
Traffic Volume (vph)	0	0	566	4	0	149
Future Volume (vph)	0	0	566	4	0	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			150	0	0
Storage Lanes	0			1	0	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	0	5085	1583	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	1611
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				4		229
Link Speed (mph)		30	30		30	
Link Distance (ft)		265	234		513	
Travel Time (s)		6.0	5.3		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	615	4	0	162
Turn Type			NA	Perm		Prot
Protected Phases			2			3
Permitted Phases				2		
Detector Phase			2	2		3
Switch Phase						
Minimum Initial (s)			10.0	10.0		3.0
Minimum Split (s)			30.0	30.0		25.0
Total Split (s)			38.0	38.0		30.0
Total Split (%)			55.9%	55.9%		44.1%
Yellow Time (s)			3.2	3.2		3.0
All-Red Time (s)			1.5	1.5		1.0
Lost Time Adjust (s)			-1.7	-1.7		-2.0
Total Lost Time (s)			3.0	3.0		2.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max	C-Max		Max
Act Effct Green (s)			35.0	35.0		28.0
Actuated g/C Ratio			0.51	0.51		0.41
v/c Ratio			0.24	0.00		0.20
Control Delay			1.9	0.2		1.4
Queue Delay			0.1	0.0		0.0
Total Delay			2.0	0.2		1.4
LOS			A	A		A
Approach Delay			2.0		1.4	
Approach LOS			A		A	
Queue Length 50th (ft)			5	0		0
Queue Length 95th (ft)			8	m0		13
Internal Link Dist (ft)		185	154		433	
Turn Bay Length (ft)				150		
Base Capacity (vph)			2617	816		798
Starvation Cap Reductn			848	0		0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			0.35	0.00		0.20

Intersection Summary			
Area Type:	Other		
Cycle Length: 68			
Actuated Cycle Length: 68			
Offset: 18 (26%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.24			
Intersection Signal Delay: 1.9		Intersection LOS: A	
Intersection Capacity Utilization 26.8%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 35: Commerce St & N Main Ave



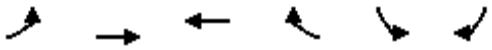


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	658	0	0	0	0	4
Future Volume (vph)	658	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	5085	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	5085	0	0	0	0	1611
Right Turn on Red		Yes				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	462			507	380	
Travel Time (s)	10.5			11.5	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	715	0	0	0	0	4
Turn Type	NA					Prot
Protected Phases	2					3
Permitted Phases						
Detector Phase	2					3
Switch Phase						
Minimum Initial (s)	10.0					3.0
Minimum Split (s)	20.6					9.0
Total Split (s)	76.0					24.0
Total Split (%)	76.0%					24.0%
Yellow Time (s)	3.2					3.0
All-Red Time (s)	1.4					1.0
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	4.6					4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max					Max
Act Effct Green (s)	71.4					20.0
Actuated g/C Ratio	0.71					0.20
v/c Ratio	0.20					0.01
Control Delay	2.9					32.2
Queue Delay	0.0					0.0
Total Delay	2.9					32.2
LOS	A					C
Approach Delay	2.9				32.3	
Approach LOS	A				C	
Queue Length 50th (ft)	37					2
Queue Length 95th (ft)	32					11
Internal Link Dist (ft)	382			427	300	
Turn Bay Length (ft)						
Base Capacity (vph)	3630					322
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.20					0.01

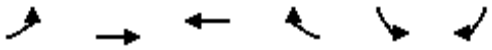
Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 30 (30%), Referenced to phase 2:EBT, Start of Yellow		
Natural Cycle: 40		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.20		
Intersection Signal Delay: 3.1	Intersection LOS: A	
Intersection Capacity Utilization 23.2%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 36: Main Plaza & Dolorosa St/Market St





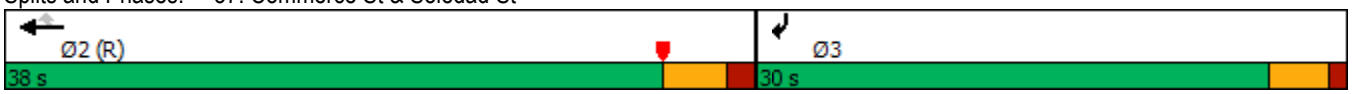
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑	↱		↱
Traffic Volume (vph)	0	0	568	217	0	4
Future Volume (vph)	0	0	568	217	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			150	0	0
Storage Lanes	0			1	0	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	0	5085	1583	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	1611
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				236		210
Link Speed (mph)		30	30		30	
Link Distance (ft)		234	520		565	
Travel Time (s)		5.3	11.8		12.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	617	236	0	4
Turn Type			NA	Perm		Prot
Protected Phases			2			3
Permitted Phases				2		
Detector Phase			2	2		3
Switch Phase						
Minimum Initial (s)			10.0	10.0		3.0
Minimum Split (s)			30.0	30.0		25.0
Total Split (s)			38.0	38.0		30.0
Total Split (%)			55.9%	55.9%		44.1%
Yellow Time (s)			3.2	3.2		3.0
All-Red Time (s)			1.5	1.5		1.0
Lost Time Adjust (s)			0.0	0.0		0.0
Total Lost Time (s)			4.7	4.7		4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max	C-Max		Max
Act Effct Green (s)			33.3	33.3		26.0
Actuated g/C Ratio			0.49	0.49		0.38
v/c Ratio			0.25	0.26		0.01
Control Delay			10.4	2.4		0.0
Queue Delay			0.0	0.0		0.0
Total Delay			10.4	2.4		0.0
LOS			B	A		A
Approach Delay			8.2			
Approach LOS			A			
Queue Length 50th (ft)			51	0		0
Queue Length 95th (ft)			71	31		0
Internal Link Dist (ft)		154	440		485	
Turn Bay Length (ft)				150		
Base Capacity (vph)			2490	895		745
Starvation Cap Reductn			0	0		0

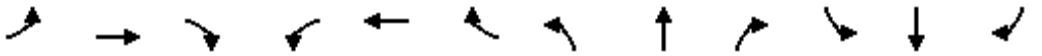


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			0.25	0.26		0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 68			
Actuated Cycle Length: 68			
Offset: 18 (26%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay: 8.1		Intersection LOS: A	
Intersection Capacity Utilization 21.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Commerce St & Soledad St





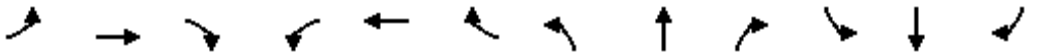
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	158	709	0	0	0	0	0	298	84
Future Volume (vph)	0	0	0	158	709	0	0	0	0	0	298	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		150
Storage Lanes	0		0	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	5040	0	0	0	0	0	3539	1583
Flt Permitted					0.991							
Satd. Flow (perm)	0	0	0	0	5040	0	0	0	0	0	3539	1583
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)												91
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		520			534			212			290	
Travel Time (s)		11.8			12.1			4.8			6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	943	0	0	0	0	0	324	91
Turn Type				Perm	NA						NA	Perm
Protected Phases					2						4	
Permitted Phases				2								4
Detector Phase				2	2						4	4
Switch Phase												
Minimum Initial (s)				10.0	10.0						5.0	5.0
Minimum Split (s)				35.0	35.0						30.0	30.0
Total Split (s)				60.0	60.0						30.0	30.0
Total Split (%)				66.7%	66.7%						33.3%	33.3%
Yellow Time (s)				3.2	3.2						3.2	3.2
All-Red Time (s)				1.4	1.4						1.4	1.4
Lost Time Adjust (s)					-0.6						-0.6	0.0
Total Lost Time (s)					4.0						4.0	4.6
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max						Max	Max
Act Effct Green (s)					56.0						26.0	25.4
Actuated g/C Ratio					0.62						0.29	0.28
v/c Ratio					0.30						0.32	0.18
Control Delay					8.2						26.1	6.6
Queue Delay					0.0						0.0	0.0
Total Delay					8.2						26.1	6.6
LOS					A						C	A
Approach Delay					8.2						21.8	
Approach LOS					A						C	
Queue Length 50th (ft)					82						75	0
Queue Length 95th (ft)					104						112	34
Internal Link Dist (ft)		440			454			132			210	
Turn Bay Length (ft)												150
Base Capacity (vph)					3136						1022	512
Starvation Cap Reductn					0						0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn					0						0	0
Storage Cap Reductn					0						0	0
Reduced v/c Ratio					0.30						0.32	0.18

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 12 (13%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.32			
Intersection Signal Delay: 12.4		Intersection LOS: B	
Intersection Capacity Utilization 31.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 38: St Mary's St & Commerce St



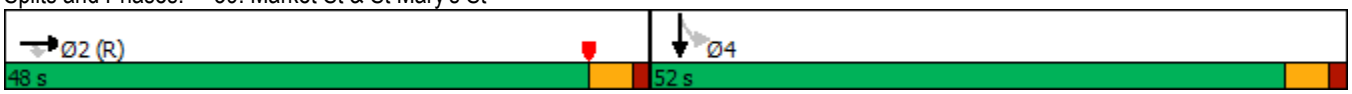


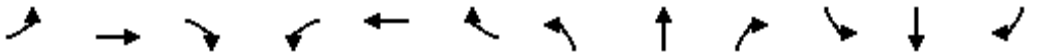
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	578	201	0	0	0	0	0	0	160	224	0
Future Volume (vph)	0	578	201	0	0	0	0	0	0	160	224	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		150
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	5085	1583	0	0	0	0	0	0	0	3468	0
Flt Permitted											0.980	
Satd. Flow (perm)	0	5085	1583	0	0	0	0	0	0	0	3468	0
Right Turn on Red			Yes			Yes			Yes	No		Yes
Satd. Flow (RTOR)			218									
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		507			530			201			212	
Travel Time (s)		11.5			12.0			4.6			4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	628	218	0	0	0	0	0	0	0	417	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									4	
Permitted Phases			2							4		
Detector Phase		2	2							4	4	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		30.0	30.0							35.0	35.0	
Total Split (s)		48.0	48.0							52.0	52.0	
Total Split (%)		48.0%	48.0%							52.0%	52.0%	
Yellow Time (s)		3.2	3.2							3.2	3.2	
All-Red Time (s)		1.3	1.3							1.5	1.5	
Lost Time Adjust (s)		-0.5	0.0								-0.7	
Total Lost Time (s)		4.0	4.5								4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max	C-Max							Max	Max	
Act Effct Green (s)		44.0	43.5								48.0	
Actuated g/C Ratio		0.44	0.44								0.48	
v/c Ratio		0.28	0.27								0.25	
Control Delay		8.9	2.8								15.9	
Queue Delay		0.0	0.0								3.3	
Total Delay		8.9	2.8								19.2	
LOS		A	A								B	
Approach Delay		7.4									19.2	
Approach LOS		A									B	
Queue Length 50th (ft)		47	0								80	
Queue Length 95th (ft)		53	0								111	
Internal Link Dist (ft)		427			450			121			132	
Turn Bay Length (ft)			150									
Base Capacity (vph)		2237	811								1664	
Starvation Cap Reductn		0	0								1127	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	0								0	
Storage Cap Reductn		0	0								0	
Reduced v/c Ratio		0.28	0.27								0.78	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 45 (45%), Referenced to phase 2:EBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay: 11.3		Intersection LOS: B	
Intersection Capacity Utilization 30.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 39: Market St & St Mary's St



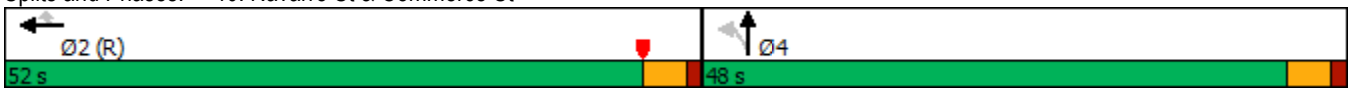


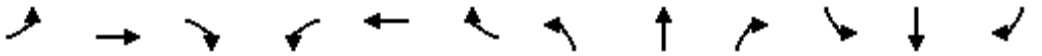
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1096	198	157	508	0	0	0	0
Future Volume (vph)	0	0	0	0	1096	198	157	508	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	5085	1583	0	3497	0	0	0	0
Flt Permitted								0.988				
Satd. Flow (perm)	0	0	0	0	5085	1583	0	3497	0	0	0	0
Right Turn on Red			Yes			Yes	No		Yes			Yes
Satd. Flow (RTOR)						215						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		534			258			251			297	
Travel Time (s)		12.1			5.9			5.7			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1191	215	0	723	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					2			4				
Permitted Phases						2	4					
Detector Phase					2	2	4	4				
Switch Phase												
Minimum Initial (s)					10.0	10.0	5.0	5.0				
Minimum Split (s)					25.0	25.0	40.0	40.0				
Total Split (s)					52.0	52.0	48.0	48.0				
Total Split (%)					52.0%	52.0%	48.0%	48.0%				
Yellow Time (s)					3.2	3.2	3.2	3.2				
All-Red Time (s)					1.3	1.3	1.4	1.4				
Lost Time Adjust (s)					-1.7	-1.7		-2.0				
Total Lost Time (s)					2.8	2.8		2.6				
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode					C-Max	C-Max	Max	Max				
Act Effct Green (s)					49.2	49.2		45.4				
Actuated g/C Ratio					0.49	0.49		0.45				
v/c Ratio					0.48	0.24		0.46				
Control Delay					6.4	1.3		13.4				
Queue Delay					0.2	0.5		1.3				
Total Delay					6.6	1.8		14.8				
LOS					A	A		B				
Approach Delay					5.9			14.8				
Approach LOS					A			B				
Queue Length 50th (ft)					94	0		166				
Queue Length 95th (ft)					132	14		219				
Internal Link Dist (ft)		454			178			171			217	
Turn Bay Length (ft)						150						
Base Capacity (vph)					2501	888		1587				
Starvation Cap Reductn					523	365		618				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn					0	0		0				
Storage Cap Reductn					0	0		0				
Reduced v/c Ratio					0.60	0.41		0.75				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 85 (85%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay: 8.9		Intersection LOS: A	
Intersection Capacity Utilization 46.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Navarro St & Commerce St





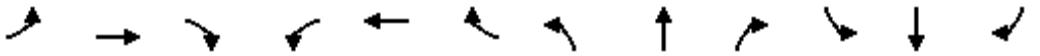
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	257	487	0	0	0	0	0	361	59	0	0	0
Future Volume (vph)	257	487	0	0	0	0	0	361	59	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	4999	0	0	0	0	0	3539	1583	0	0	0
Flt Permitted		0.983										
Satd. Flow (perm)	0	4999	0	0	0	0	0	3539	1583	0	0	0
Right Turn on Red	No		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									64			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		530			100			275			251	
Travel Time (s)		12.0			2.3			6.3			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	808	0	0	0	0	0	392	64	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		2						4				
Permitted Phases	2								4			
Detector Phase	2	2						4	4			
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0	10.0			
Minimum Split (s)	40.0	40.0						25.0	25.0			
Total Split (s)	60.0	60.0						40.0	40.0			
Total Split (%)	60.0%	60.0%						40.0%	40.0%			
Yellow Time (s)	3.2	3.2						3.2	3.2			
All-Red Time (s)	1.3	1.3						1.5	1.5			
Lost Time Adjust (s)		-1.7						-2.0	-2.0			
Total Lost Time (s)		2.8						2.7	2.7			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max						Max	Max			
Act Effct Green (s)		57.2						37.3	37.3			
Actuated g/C Ratio		0.57						0.37	0.37			
v/c Ratio		0.28						0.30	0.10			
Control Delay		4.0						22.9	5.8			
Queue Delay		0.0						0.1	0.0			
Total Delay		4.0						23.0	5.8			
LOS		A						C	A			
Approach Delay		4.0						20.6				
Approach LOS		A						C				
Queue Length 50th (ft)		64						91	0			
Queue Length 95th (ft)		80						128	27			
Internal Link Dist (ft)		450			20			195			171	
Turn Bay Length (ft)									150			
Base Capacity (vph)		2859						1320	630			
Starvation Cap Reductn		0						0	0			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						256	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.28						0.37	0.10			

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 75 (75%), Referenced to phase 2:EBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay: 10.0		Intersection LOS: B	
Intersection Capacity Utilization 31.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Market St & Navarro St





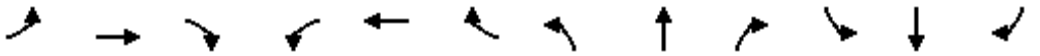
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	61	1014	68	0	0	0	0	32	12
Future Volume (vph)	0	0	0	61	1014	68	0	0	0	0	32	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	5070	1583	0	0	0	0	1794	0
Flt Permitted					0.997							
Satd. Flow (perm)	0	0	0	0	5070	1273	0	0	0	0	1794	0
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)						74					13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		258			287			74			386	
Travel Time (s)		5.9			6.5			1.7			8.8	
Confl. Peds. (#/hr)						200						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1168	74	0	0	0	0	48	0
Turn Type				Perm	NA	Perm					NA	
Protected Phases					2						4	
Permitted Phases				2		2						
Detector Phase				2	2	2					4	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0					5.0	
Minimum Split (s)				35.0	35.0	35.0					30.0	
Total Split (s)				60.0	60.0	60.0					40.0	
Total Split (%)				60.0%	60.0%	60.0%					40.0%	
Yellow Time (s)				3.2	3.2	3.2					3.2	
All-Red Time (s)				1.1	1.1	1.1					1.4	
Lost Time Adjust (s)					-0.3	0.0					-0.6	
Total Lost Time (s)					4.0	4.3					4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max	C-Max					Max	
Act Effct Green (s)					56.0	55.7					36.0	
Actuated g/C Ratio					0.56	0.56					0.36	
v/c Ratio					0.41	0.10					0.07	
Control Delay					2.9	0.5					17.0	
Queue Delay					0.2	0.0					0.0	
Total Delay					3.1	0.5					17.0	
LOS					A	A					B	
Approach Delay					2.9						17.0	
Approach LOS					A						B	
Queue Length 50th (ft)					33	1					14	
Queue Length 95th (ft)					41	0					39	
Internal Link Dist (ft)		178			207			1			306	
Turn Bay Length (ft)						150						
Base Capacity (vph)					2839	741					654	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					698	0					0	
Spillback Cap Reductn					239	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.55	0.10					0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 80 (80%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 3.4		Intersection LOS: A	
Intersection Capacity Utilization 31.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 42: Commerce St & Presa St





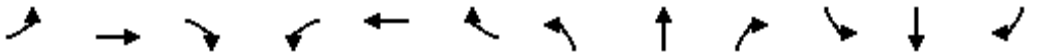
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	534	12	0	0	0	0	0	9	37	21	0
Future Volume (vph)	0	534	12	0	0	0	0	0	9	37	21	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	5085	1583	0	0	0	0	0	1611	1681	1770	0
Flt Permitted										0.950		
Satd. Flow (perm)	0	5085	1583	0	0	0	0	0	1611	1681	1770	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			19						284	40		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		159			275			339			188	
Travel Time (s)		3.6			6.3			7.7			4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)										0%		
Lane Group Flow (vph)	0	580	13	0	0	0	0	0	10	40	23	0
Turn Type		NA	Perm						Perm	Split	NA	
Protected Phases		2								4	4	
Permitted Phases			2						4			
Detector Phase		2	2						4	4	4	
Switch Phase												
Minimum Initial (s)		10.0	10.0						5.0	5.0	5.0	
Minimum Split (s)		35.0	35.0						30.0	30.0	30.0	
Total Split (s)		60.0	60.0						40.0	40.0	40.0	
Total Split (%)		60.0%	60.0%						40.0%	40.0%	40.0%	
Yellow Time (s)		3.2	3.2						3.2	3.2	3.2	
All-Red Time (s)		1.5	1.5						1.5	1.5	1.5	
Lost Time Adjust (s)		-0.7	-0.7						-0.7	-0.7	-0.7	
Total Lost Time (s)		4.0	4.0						4.0	4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max	C-Max						Max	Max	Max	
Act Effct Green (s)		56.0	56.0						36.0	36.0	36.0	
Actuated g/C Ratio		0.56	0.56						0.36	0.36	0.36	
v/c Ratio		0.20	0.01						0.01	0.06	0.04	
Control Delay		1.9	0.1						0.0	13.7	26.5	
Queue Delay		0.2	0.0						0.0	0.0	0.0	
Total Delay		2.0	0.1						0.0	13.7	26.5	
LOS		A	A						A	B	C	
Approach Delay		2.0									18.3	
Approach LOS		A									B	
Queue Length 50th (ft)		6	0						0	6	11	
Queue Length 95th (ft)		14	1						0	30	m30	
Internal Link Dist (ft)		79			195			259			108	
Turn Bay Length (ft)			150									
Base Capacity (vph)		2847	894						761	630	637	
Starvation Cap Reductn		1331	0						0	0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	0						0	0	0	
Storage Cap Reductn		0	0						0	0	0	
Reduced v/c Ratio		0.38	0.01						0.01	0.06	0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 80 (80%), Referenced to phase 2:EBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.20			
Intersection Signal Delay: 3.5		Intersection LOS: A	
Intersection Capacity Utilization 31.7%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 43: Presa St & Market St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	118	1139	0	0	0	0	0	179	78
Future Volume (vph)	0	0	0	118	1139	0	0	0	0	0	179	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	1770	5085	0	0	0	0	0	3376	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	5085	0	0	0	0	0	3376	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				128							72	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		287			180			334			345	
Travel Time (s)		6.5			4.1			7.6			7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	128	1238	0	0	0	0	0	280	0
Turn Type				Perm	NA						NA	
Protected Phases					6						8	
Permitted Phases				6								
Detector Phase				6	6						8	
Switch Phase												
Minimum Initial (s)				10.0	10.0						5.0	
Minimum Split (s)				35.0	35.0						20.0	
Total Split (s)				66.0	66.0						34.0	
Total Split (%)				66.0%	66.0%						34.0%	
Yellow Time (s)				3.2	3.2						3.2	
All-Red Time (s)				1.1	1.1						1.6	
Lost Time Adjust (s)				-1.3	-1.3						-2.0	
Total Lost Time (s)				3.0	3.0						2.8	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max						Min	
Act Effct Green (s)				63.0	63.0						31.2	
Actuated g/C Ratio				0.63	0.63						0.31	
v/c Ratio				0.11	0.39						0.25	
Control Delay				0.2	1.8						19.6	
Queue Delay				0.6	0.1						0.0	
Total Delay				0.8	1.9						19.6	
LOS				A	A						B	
Approach Delay					1.8						19.6	
Approach LOS					A						B	
Queue Length 50th (ft)				1	16						51	
Queue Length 95th (ft)				1	24						84	
Internal Link Dist (ft)		207			100			254			265	
Turn Bay Length (ft)												
Base Capacity (vph)				1162	3203						1102	
Starvation Cap Reductn				760	730						0	
Spillback Cap Reductn				0	0						0	
Storage Cap Reductn				0	0						0	
Reduced v/c Ratio				0.32	0.50						0.25	

Lane Group	Ø2	Ø3	Ø4
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	2	3	4
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	10.0	3.0	5.0
Minimum Split (s)	30.0	15.0	25.0
Total Split (s)	50.0	16.0	34.0
Total Split (%)	50%	16%	34%
Yellow Time (s)	3.2	3.0	3.2
All-Red Time (s)	1.3	1.2	2.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 70 (70%), Referenced to phase 2:WBT and 6:, Start of Yellow		
Natural Cycle: 70		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.43		
Intersection Signal Delay: 4.8	Intersection LOS: A	
Intersection Capacity Utilization 36.1%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 44: Commerce St & Losoya St



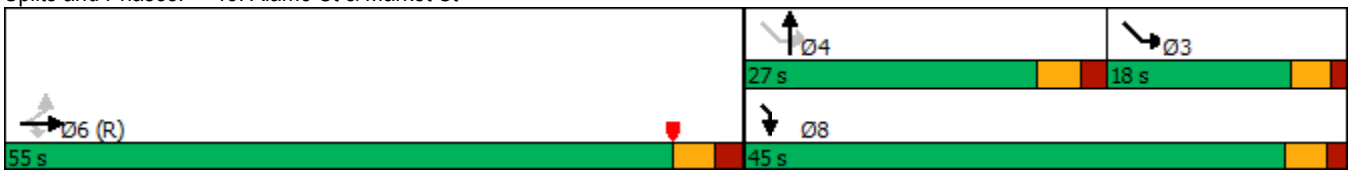


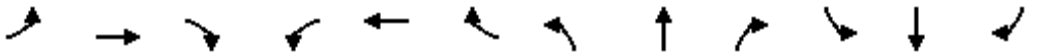
Lane Group	EBL	EBT	EBR	NBT	NBR	SEL	SER
Lane Configurations							
Traffic Volume (vph)	67	484	61	229	244	283	264
Future Volume (vph)	67	484	61	229	244	283	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		0	150	0
Storage Lanes	0		1		1	1	1
Taper Length (ft)	25					25	
Satd. Flow (prot)	0	5055	1583	3539	1583	3330	1441
Flt Permitted		0.994				0.966	
Satd. Flow (perm)	0	5055	1583	3539	1583	3330	1441
Right Turn on Red			Yes		Yes		
Satd. Flow (RTOR)			76		265		
Link Speed (mph)		30		30		30	
Link Distance (ft)		223		809		334	
Travel Time (s)		5.1		18.4		7.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)							47%
Lane Group Flow (vph)	0	599	66	249	265	443	152
Turn Type	Perm	NA	Perm	NA	Perm	D.P+P	Prot
Protected Phases		6		4		3	8
Permitted Phases	6		6		4	4	
Detector Phase	6	6	6	4	4	3	8
Switch Phase							
Minimum Initial (s)	10.0	10.0	10.0	5.0	5.0	3.0	5.0
Minimum Split (s)	30.0	30.0	30.0	25.0	25.0	15.0	40.0
Total Split (s)	55.0	55.0	55.0	27.0	27.0	18.0	45.0
Total Split (%)	55.0%	55.0%	55.0%	27.0%	27.0%	18.0%	45.0%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.0	3.2
All-Red Time (s)	2.1	2.1	2.1	2.0	2.0	1.3	1.6
Lost Time Adjust (s)		-1.3	-1.3	-1.2	-1.2	-0.3	-0.8
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag				Lead	Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	C-Min	C-Min	C-Min	Min	Min	Min	Min
Act Effct Green (s)		71.7	71.7	11.9	11.9	20.3	20.3
Actuated g/C Ratio		0.72	0.72	0.12	0.12	0.20	0.20
v/c Ratio		0.17	0.06	0.59	0.63	0.66	0.52
Control Delay		4.6	1.1	47.3	12.2	46.2	46.9
Queue Delay		0.0	0.0	0.1	0.0	0.0	0.0
Total Delay		4.6	1.1	47.4	12.2	46.2	46.9
LOS		A	A	D	B	D	D
Approach Delay		4.3		29.2		46.4	
Approach LOS		A		C		D	
Queue Length 50th (ft)		37	0	80	0	141	101
Queue Length 95th (ft)		42	6	115	70	188	169
Internal Link Dist (ft)		143		729		254	
Turn Bay Length (ft)						150	
Base Capacity (vph)		3626	1157	813	568	995	590
Starvation Cap Reductn		0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	NBT	NBR	SEL	SER
Spillback Cap Reductn		1	0	78	0	0	0
Storage Cap Reductn		0	0	0	0	0	0
Reduced v/c Ratio		0.17	0.06	0.34	0.47	0.45	0.26

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 85 (85%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 25.6		Intersection LOS: C	
Intersection Capacity Utilization 37.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 45: Alamo St & Market St





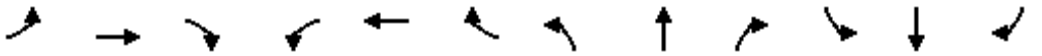
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1162	16	91	223	0	0	0	4
Future Volume (vph)	0	0	0	0	1162	16	91	223	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	0	6395	0	1681	1766	0	0	0	1611
Flt Permitted							0.950	0.998				
Satd. Flow (perm)	0	0	0	0	6395	0	1681	1766	0	0	0	1611
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					3		89	62				299
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		180			560			263			375	
Travel Time (s)		4.1			12.7			6.0			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)							10%					
Lane Group Flow (vph)	0	0	0	0	1280	0	89	252	0	0	0	4
Turn Type					NA		Split	NA				Prot
Protected Phases					2		4	4				3
Permitted Phases												
Detector Phase					2		4	4				3
Switch Phase												
Minimum Initial (s)					10.0		5.0	5.0				3.0
Minimum Split (s)					30.0		25.0	25.0				15.0
Total Split (s)					50.0		34.0	34.0				16.0
Total Split (%)					50.0%		34.0%	34.0%				16.0%
Yellow Time (s)					3.2		3.2	3.2				3.0
All-Red Time (s)					1.3		2.0	2.0				1.2
Lost Time Adjust (s)					-1.7		-2.3	-2.3				-1.1
Total Lost Time (s)					2.8		2.9	2.9				3.1
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode					C-Max		Max	Max				None
Act Effct Green (s)					61.7		31.1	31.1				4.6
Actuated g/C Ratio					0.62		0.31	0.31				0.05
v/c Ratio					0.32		0.15	0.43				0.01
Control Delay					0.5		10.1	19.0				0.0
Queue Delay					0.0		0.0	5.1				0.0
Total Delay					0.5		10.1	24.1				0.0
LOS					A		B	C				A
Approach Delay					0.5			20.4				
Approach LOS					A			C				
Queue Length 50th (ft)					2		7	147				0
Queue Length 95th (ft)					3		83	222				0
Internal Link Dist (ft)		100			480			183			295	
Turn Bay Length (ft)												
Base Capacity (vph)					3944		584	591				468
Starvation Cap Reductn					0		0	270				0
Spillback Cap Reductn					0		0	0				0
Storage Cap Reductn					0		0	0				0
Reduced v/c Ratio					0.32		0.15	0.79				0.01

Lane Group	Ø6	Ø8
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	6	8
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	10.0	5.0
Minimum Split (s)	35.0	20.0
Total Split (s)	66.0	34.0
Total Split (%)	66%	34%
Yellow Time (s)	3.2	3.2
All-Red Time (s)	1.1	1.6
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Recall Mode	C-Max	Min
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 70 (70%), Referenced to phase 2:WBT and 6:, Start of Yellow		
Natural Cycle: 70		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.43		
Intersection Signal Delay: 4.7	Intersection LOS: A	
Intersection Capacity Utilization 42.2%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 46: Alamo St & Commerce St



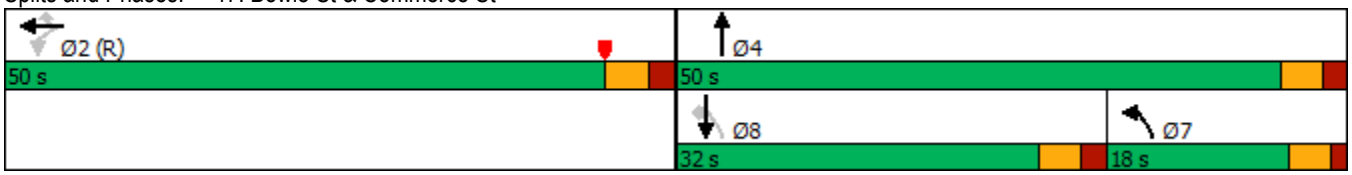


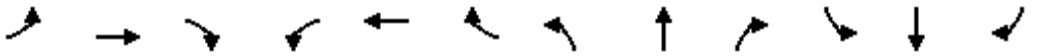
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	208	1368	223	4	61	0	0	214	53
Future Volume (vph)	0	0	0	208	1368	223	4	61	0	0	214	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	1770	5085	1583	0	3529	0	0	3539	1583
Flt Permitted				0.950				0.955				
Satd. Flow (perm)	0	0	0	1390	5085	1583	0	3380	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						242						81
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		305			635			142			349	
Travel Time (s)		6.9			14.4			3.2			7.9	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	226	1487	242	0	70	0	0	233	58
Turn Type				Perm	NA	Perm	D.P+P	NA			NA	Perm
Protected Phases					2		7	4			8	
Permitted Phases				2		2	8					8
Detector Phase				2	2	2	7	4			8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	3.0	5.0			5.0	5.0
Minimum Split (s)				30.0	30.0	30.0	15.0	40.0			25.0	25.0
Total Split (s)				50.0	50.0	50.0	18.0	50.0			32.0	32.0
Total Split (%)				50.0%	50.0%	50.0%	18.0%	50.0%			32.0%	32.0%
Yellow Time (s)				3.2	3.2	3.2	3.0	3.2			3.2	3.2
All-Red Time (s)				2.1	2.1	2.1	1.4	1.9			1.9	1.9
Lost Time Adjust (s)				-1.3	-1.3	-1.3		-1.1			-1.1	-1.1
Total Lost Time (s)				4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	Max
Act Effct Green (s)				46.0	46.0	46.0		46.0			28.0	28.0
Actuated g/C Ratio				0.46	0.46	0.46		0.46			0.28	0.28
v/c Ratio				0.35	0.64	0.28		0.04			0.24	0.12
Control Delay				19.4	22.1	3.0		15.0			28.5	3.8
Queue Delay				0.0	0.0	0.0		0.0			0.0	0.0
Total Delay				19.4	22.1	3.0		15.0			28.5	3.8
LOS				B	C	A		B			C	A
Approach Delay					19.5			15.0			23.6	
Approach LOS					B			B			C	
Queue Length 50th (ft)				90	257	0		12			60	0
Queue Length 95th (ft)				148	306	41		25			92	18
Internal Link Dist (ft)		225			555			62			269	
Turn Bay Length (ft)												
Base Capacity (vph)				639	2339	858		1575			990	501
Starvation Cap Reductn				0	0	0		0			0	0
Spillback Cap Reductn				0	0	0		0			0	0
Storage Cap Reductn				0	0	0		0			0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio				0.35	0.64	0.28		0.04			0.24	0.12

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 30 (30%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 19.9		Intersection LOS: B	
Intersection Capacity Utilization 44.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 47: Bowie St & Commerce St



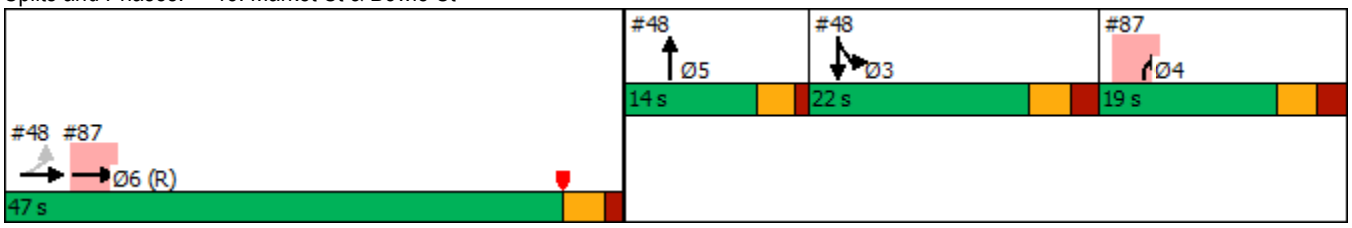


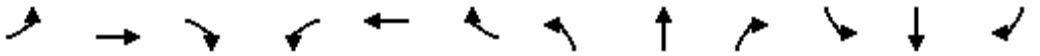
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	133	425	12	0	0	0	0	21	20	208	64	0
Future Volume (vph)	133	425	12	0	0	0	0	21	20	208	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	5009	0	0	0	0	0	1740	0	1681	1725	0
Flt Permitted		0.988								0.950	0.975	
Satd. Flow (perm)	0	5009	0	0	0	0	0	1740	0	1681	1725	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		4										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		196			161			284			144	
Travel Time (s)		4.5			3.7			6.5			3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)										33%		
Lane Group Flow (vph)	0	620	0	0	0	0	0	45	0	151	145	0
Turn Type	Perm	NA						NA		Split	NA	
Protected Phases		6						5		3	3	
Permitted Phases	6											
Detector Phase	6	6						5		3	3	
Switch Phase												
Minimum Initial (s)	10.0	10.0						3.0		5.0	5.0	
Minimum Split (s)	25.0	25.0						12.0		22.0	22.0	
Total Split (s)	47.0	47.0						14.0		22.0	22.0	
Total Split (%)	46.1%	46.1%						13.7%		21.6%	21.6%	
Yellow Time (s)	3.2	3.2						3.0		3.2	3.2	
All-Red Time (s)	1.5	1.5						1.0		2.1	2.1	
Lost Time Adjust (s)		-0.7						0.0		-1.3	-1.5	
Total Lost Time (s)		4.0						4.0		4.0	3.8	
Lead/Lag								Lead		Lag	Lag	
Lead-Lag Optimize?								Yes		Yes	Yes	
Recall Mode	C-Min	C-Min						None		None	None	
Act Effct Green (s)		17.3						6.1		13.8	14.0	
Actuated g/C Ratio		0.17						0.06		0.14	0.14	
v/c Ratio		0.73						0.43		0.66	0.61	
Control Delay		44.9						58.1		55.2	51.8	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		44.9						58.1		55.2	51.8	
LOS		D						E		E	D	
Approach Delay		44.9						58.1			53.5	
Approach LOS		D						E			D	
Queue Length 50th (ft)		141						29		100	94	
Queue Length 95th (ft)		171						64		160	153	
Internal Link Dist (ft)		116			81			204			64	
Turn Bay Length (ft)												
Base Capacity (vph)		2113						170		301	312	
Starvation Cap Reductn		0						0		0	0	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.29						0.26		0.50	0.46	

Lane Group	Ø4
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	4
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	12.0
Total Split (s)	19.0
Total Split (%)	19%
Yellow Time (s)	3.0
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	Max
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary	
Area Type:	Other
Cycle Length: 102	
Actuated Cycle Length: 102	
Offset: 10 (10%), Referenced to phase 6:EBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 48.2	Intersection LOS: D
Intersection Capacity Utilization 32.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 48: Market St & Bowie St





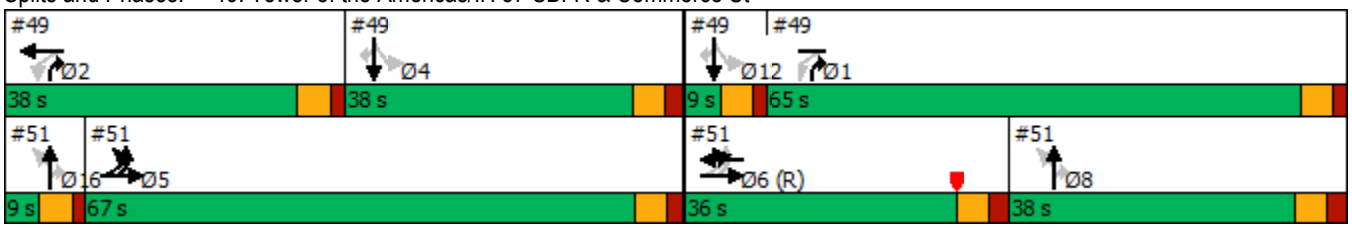
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	89	983	0	0	0	137	104	35	615
Future Volume (vph)	0	0	0	89	983	0	0	0	137	104	35	615
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	0	3525	0	0	0	1611	0	3412	1583
Flt Permitted					0.996						0.964	
Satd. Flow (perm)	0	0	0	0	3525	0	0	0	1611	0	3412	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)												139
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		635			283			336			353	
Travel Time (s)		14.4			6.4			7.6			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1165	0	0	0	149	0	151	668
Turn Type				Perm	NA				custom	Perm	NA	Perm
Protected Phases					1 2				1 2		4 12	
Permitted Phases				1 2						4 12		4 12
Detector Phase				1 2	1 2				1 2	4 12	4 12	4 12
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode												
Act Effct Green (s)					81.9				81.9		60.1	60.1
Actuated g/C Ratio					0.55				0.55		0.40	0.40
v/c Ratio					0.61				0.17		0.11	0.93
Control Delay					22.2				16.8		29.7	54.9
Queue Delay					3.0				0.5		0.0	0.0
Total Delay					25.2				17.3		29.7	54.9
LOS					C				B		C	D
Approach Delay					25.2			17.3			50.3	
Approach LOS					C			B			D	
Queue Length 50th (ft)					498				70		48	529
Queue Length 95th (ft)					550				100		79	#844
Internal Link Dist (ft)		555			203			256			273	
Turn Bay Length (ft)												
Base Capacity (vph)					2301				1052		1367	717
Starvation Cap Reductn					996				595		0	0
Spillback Cap Reductn					0				0		0	0
Storage Cap Reductn					0				0		0	0
Reduced v/c Ratio					0.89				0.33		0.11	0.93

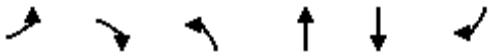
Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø8	Ø12	Ø16
Lane Configurations								
Traffic Volume (vph)								
Future Volume (vph)								
Ideal Flow (vphpl)								
Satd. Flow (prot)								
Flt Permitted								
Satd. Flow (perm)								
Right Turn on Red								
Satd. Flow (RTOR)								
Link Speed (mph)								
Link Distance (ft)								
Travel Time (s)								
Peak Hour Factor								
Shared Lane Traffic (%)								
Lane Group Flow (vph)								
Turn Type								
Protected Phases	1	2	4	5	6	8	12	16
Permitted Phases								
Detector Phase								
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	1.0	1.0
Minimum Split (s)	37.3	38.0	38.0	23.7	23.7	38.0	6.1	7.4
Total Split (s)	65.0	38.0	38.0	67.0	36.0	38.0	9.0	9.0
Total Split (%)	43%	25%	25%	45%	24%	25%	6%	6%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.7	1.7	2.4	2.1	2.1	2.4	1.5	1.5
Lost Time Adjust (s)								
Total Lost Time (s)								
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	None	None
Act Effct Green (s)								
Actuated g/C Ratio								
v/c Ratio								
Control Delay								
Queue Delay								
Total Delay								
LOS								
Approach Delay								
Approach LOS								
Queue Length 50th (ft)								
Queue Length 95th (ft)								
Internal Link Dist (ft)								
Turn Bay Length (ft)								
Base Capacity (vph)								
Starvation Cap Reductn								
Spillback Cap Reductn								
Storage Cap Reductn								
Reduced v/c Ratio								

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 6:EBWB, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 34.3	Intersection LOS: C
Intersection Capacity Utilization 74.5%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 49: Tower of the Americas/IH 37 SBFR & Commerce St





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	138	506	0	0	113	0
Future Volume (vph)	138	506	0	0	113	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1770	2787	0	0	3539	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	2787	0	0	3539	0
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	653			629	336	
Travel Time (s)	14.8			14.3	7.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	150	550	0	0	123	0
Turn Type	Prot	Prot			NA	
Protected Phases	6	6			8	
Permitted Phases						
Detector Phase	6	6			8	
Switch Phase						
Minimum Initial (s)	10.0	10.0			6.0	
Minimum Split (s)	21.0	21.0			27.3	
Total Split (s)	67.0	67.0			33.0	
Total Split (%)	67.0%	67.0%			33.0%	
Yellow Time (s)	3.6	3.6			3.6	
All-Red Time (s)	2.0	2.0			2.7	
Lost Time Adjust (s)	-1.6	-1.6			-2.3	
Total Lost Time (s)	4.0	4.0			4.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min	C-Min			None	
Act Effct Green (s)	82.5	82.5			9.5	
Actuated g/C Ratio	0.82	0.82			0.10	
v/c Ratio	0.10	0.24			0.37	
Control Delay	2.0	2.3			45.2	
Queue Delay	0.0	0.0			0.0	
Total Delay	2.0	2.3			45.2	
LOS	A	A			D	
Approach Delay	2.2				45.2	
Approach LOS	A				D	
Queue Length 50th (ft)	13	30			39	
Queue Length 95th (ft)	27	50			66	
Internal Link Dist (ft)	573			549	256	
Turn Bay Length (ft)						
Base Capacity (vph)	1459	2298			1026	
Starvation Cap Reductn	0	0			0	
Spillback Cap Reductn	0	0			0	
Storage Cap Reductn	0	0			0	
Reduced v/c Ratio	0.10	0.24			0.12	

Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 0 (0%), Referenced to phase 6:EBL, Start of Yellow		
Natural Cycle: 50		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.37		
Intersection Signal Delay: 8.6	Intersection LOS: A	
Intersection Capacity Utilization 29.4%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 50: Market St & Tower of the Americas





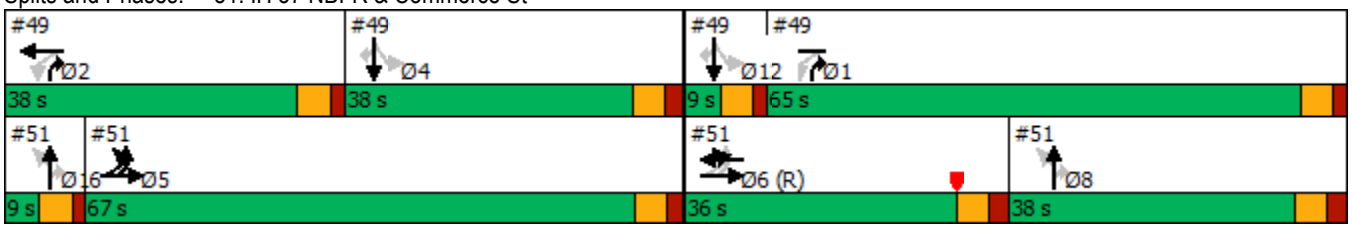
Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	NBL	NBT	NBR	Ø1	Ø2	Ø4
Lane Configurations												
Traffic Volume (vph)	46	22	167	367	107	36	604	280	184			
Future Volume (vph)	46	22	167	367	107	36	604	280	184			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Storage Length (ft)		0			100		0		0			
Storage Lanes		1			1		2		1			
Taper Length (ft)		25					25					
Satd. Flow (prot)	0	1770	1863	3539	1583	0	3433	1863	1583			
Flt Permitted		0.331					0.950					
Satd. Flow (perm)	0	617	1863	3539	1583	0	3433	1863	1583			
Right Turn on Red						Yes			Yes			
Satd. Flow (RTOR)					141				200			
Link Speed (mph)			30	30				30				
Link Distance (ft)			283	712				755				
Travel Time (s)			6.4	16.2				17.2				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	74	182	399	155	0	657	304	200			
Turn Type	D.P+P	D.P+P	NA	NA	Prot		Perm	NA	Perm			
Protected Phases	5	5	5 6	6	6			8 16		1	2	4
Permitted Phases	6	6					8 16		8 16			
Detector Phase	5	5	5 6	6	6		8 16	8 16	8 16			
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0					5.0	5.0	5.0
Minimum Split (s)	23.7	23.7		23.7	23.7					37.3	38.0	38.0
Total Split (s)	67.0	67.0		36.0	36.0					65.0	38.0	38.0
Total Split (%)	44.7%	44.7%		24.0%	24.0%					43%	25%	25%
Yellow Time (s)	3.6	3.6		3.6	3.6					3.6	3.6	3.6
All-Red Time (s)	2.1	2.1		2.1	2.1					1.7	1.7	2.4
Lost Time Adjust (s)		-1.7		-1.7	-1.7							
Total Lost Time (s)		4.0		4.0	4.0							
Lead/Lag	Lag	Lag		Lead	Lead					Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes					Yes	Yes	Yes
Recall Mode	None	None		C-Max	C-Max					None	None	None
Act Effct Green (s)		95.0	99.0	32.0	32.0		43.0	43.0	41.0			
Actuated g/C Ratio		0.63	0.66	0.21	0.21		0.29	0.29	0.27			
v/c Ratio		0.08	0.15	0.53	0.35		0.67	0.57	0.35			
Control Delay		5.3	5.5	55.3	11.7		51.2	50.6	6.9			
Queue Delay		0.0	1.1	57.5	0.0		0.0	0.0	0.0			
Total Delay		5.3	6.6	112.7	11.7		51.2	50.6	6.9			
LOS		A	A	F	B		D	D	A			
Approach Delay			6.3	84.5				43.4				
Approach LOS			A	F				D				
Queue Length 50th (ft)		13	34	184	11		293	255	0			
Queue Length 95th (ft)		24	51	240	74		363	359	63			
Internal Link Dist (ft)			203	632				675				
Turn Bay Length (ft)					100							
Base Capacity (vph)		875	1229	754	448		983	534	576			
Starvation Cap Reductn		0	838	0	0		0	0	0			

Lane Group	Ø8	Ø12	Ø16
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	8	12	16
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	1.0	1.0
Minimum Split (s)	38.0	6.1	7.4
Total Split (s)	38.0	9.0	9.0
Total Split (%)	25%	6%	6%
Yellow Time (s)	3.6	3.6	3.6
All-Red Time (s)	2.4	1.5	1.5
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes
Recall Mode	None	None	None
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			

Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	NBL	NBT	NBR	Ø1	Ø2	Ø4
Spillback Cap Reductn		0	0	408	0		0	0	0			
Storage Cap Reductn		0	0	0	0		0	0	0			
Reduced v/c Ratio		0.08	0.47	1.15	0.35		0.67	0.57	0.35			

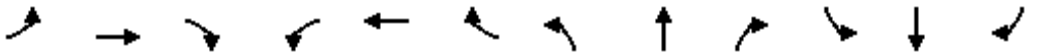
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 6:EBWB, Start of Yellow			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 50.1		Intersection LOS: D	
Intersection Capacity Utilization 41.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 51: IH 37 NBFR & Commerce St



Lane Group	Ø8	Ø12	Ø16
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

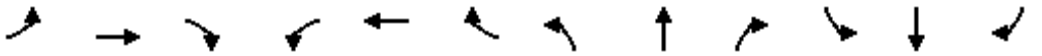


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	283	8	5	425	3	31	2	4	1	1	46
Future Volume (vph)	13	283	8	5	425	3	31	2	4	1	1	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3518	0	0	3532	0	1770	1676	0	0	1619	0
Flt Permitted		0.933			0.952		0.798				0.994	
Satd. Flow (perm)	0	3289	0	0	3366	0	1486	1676	0	0	1611	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			1			4			50	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		712			189			421			307	
Travel Time (s)		16.2			4.3			9.6			7.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	331	0	0	470	0	34	6	0	0	52	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	45.0	45.0		45.0	45.0		20.0	20.0		20.0	20.0	
Total Split (s)	68.0	68.0		68.0	68.0		32.0	32.0		32.0	32.0	
Total Split (%)	68.0%	68.0%		68.0%	68.0%		32.0%	32.0%		32.0%	32.0%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.4	1.4		1.4	1.4		1.8	1.8		1.8	1.8	
Lost Time Adjust (s)		-0.6			-0.6		-1.0	-1.0			-1.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		87.2			87.2		7.8	7.8			7.8	
Actuated g/C Ratio		0.87			0.87		0.08	0.08			0.08	
v/c Ratio		0.12			0.16		0.30	0.04			0.30	
Control Delay		1.4			1.5		49.9	31.2			18.1	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		1.4			1.5		49.9	31.2			18.1	
LOS		A			A		D	C			B	
Approach Delay		1.4			1.5			47.1			18.1	
Approach LOS		A			A			D			B	
Queue Length 50th (ft)		12			17		21	1			1	
Queue Length 95th (ft)		23			33		51	14			37	
Internal Link Dist (ft)		632			109			341			227	
Turn Bay Length (ft)												
Base Capacity (vph)		2869			2936		416	472			487	
Starvation Cap Reductn		0			0		0	0			0	
Spillback Cap Reductn		0			0		0	0			0	
Storage Cap Reductn		0			0		0	0			0	
Reduced v/c Ratio		0.12			0.16		0.08	0.01			0.11	

Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 10 (10%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow		
Natural Cycle: 65		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.30		
Intersection Signal Delay: 4.5	Intersection LOS: A	
Intersection Capacity Utilization 32.7%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 52: Hoefgen St & Commerce St

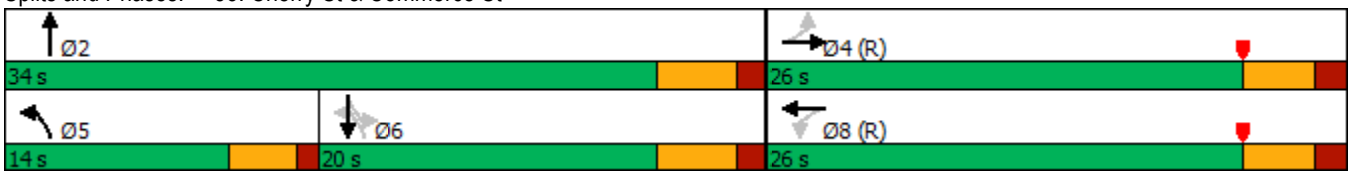


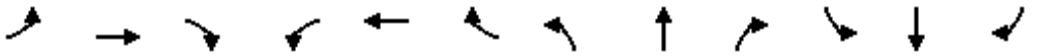


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	229	24	43	352	57	67	253	63	25	125	14
Future Volume (vph)	35	229	24	43	352	57	67	253	63	25	125	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3476	0	0	3455	0	0	3420	0	0	3465	0
Flt Permitted		0.876			0.902			0.860			0.857	
Satd. Flow (perm)	0	3063	0	0	3132	0	0	2968	0	0	2994	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			30			54			15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			236			259			1425	
Travel Time (s)		8.2			5.4			5.9			32.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	313	0	0	492	0	0	416	0	0	178	0
Turn Type	Perm	NA		Perm	NA		D.P+P	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			6			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		3.0	10.0		10.0	10.0	
Minimum Split (s)	18.0	18.0		18.0	18.0		12.0	24.0		14.9	14.9	
Total Split (s)	26.0	26.0		26.0	26.0		14.0	34.0		20.0	20.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		23.3%	56.7%		33.3%	33.3%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.0	3.6		3.6	3.6	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.3		1.3	1.3	
Lost Time Adjust (s)		-0.7			-0.7			-0.9			-0.9	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	Min		Min	Min	
Act Effct Green (s)		38.7			38.7			13.3			13.3	
Actuated g/C Ratio		0.64			0.64			0.22			0.22	
v/c Ratio		0.16			0.24			0.60			0.26	
Control Delay		4.7			5.0			21.4			29.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		4.7			5.0			21.4			29.0	
LOS		A			A			C			C	
Approach Delay		4.7			5.0			21.4			29.0	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		17			28			62			33	
Queue Length 95th (ft)		39			61			91			31	
Internal Link Dist (ft)		280			156			179			1345	
Turn Bay Length (ft)												
Base Capacity (vph)		1982			2031			1511			826	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.16			0.24			0.28			0.22	

Intersection Summary		
Area Type:	Other	
Cycle Length: 60		
Actuated Cycle Length: 60		
Offset: 47 (78%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow		
Natural Cycle: 45		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.60		
Intersection Signal Delay: 12.9		Intersection LOS: B
Intersection Capacity Utilization 53.5%		ICU Level of Service A
Analysis Period (min) 15		

Splits and Phases: 53: Cherry St & Commerce St



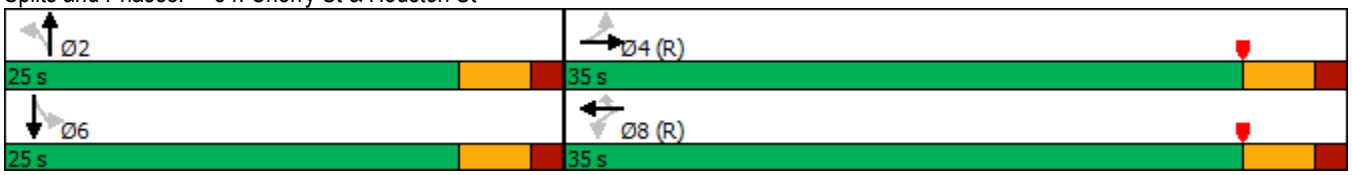


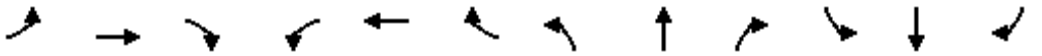
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	89	42	22	100	24	45	227	33	8	156	3
Future Volume (vph)	4	89	42	22	100	24	45	227	33	8	156	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3326	0	0	1846	1583	0	3442	0	0	3521	0
Flt Permitted		0.951			0.950			0.878			0.929	
Satd. Flow (perm)	0	3164	0	0	1762	1518	0	3025	0	0	3274	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		46				31		24			3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		480			472			1425			459	
Travel Time (s)		10.9			10.7			32.4			10.4	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	147	0	0	133	26	0	332	0	0	182	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	6.0	6.0		6.0	6.0	
Minimum Split (s)	25.0	25.0		25.0	25.0	25.0	18.0	18.0		18.0	18.0	
Total Split (s)	35.0	35.0		35.0	35.0	35.0	25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%	58.3%	41.7%	41.7%		41.7%	41.7%	
Yellow Time (s)	3.2	3.2		3.2	3.2	3.2	3.2	3.2		3.2	3.2	
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-0.7			-0.7	-0.7		-0.7			-0.7	
Total Lost Time (s)		4.0			4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Min	Min		Min	Min	
Act Effct Green (s)		40.8			40.8	40.8		11.2			11.2	
Actuated g/C Ratio		0.68			0.68	0.68		0.19			0.19	
v/c Ratio		0.07			0.11	0.02		0.57			0.30	
Control Delay		2.8			3.4	1.1		16.0			21.2	
Queue Delay		0.0			0.0	0.0		0.0			0.0	
Total Delay		2.8			3.4	1.1		16.0			21.2	
LOS		A			A	A		B			C	
Approach Delay		2.8			3.1			16.0			21.2	
Approach LOS		A			A			B			C	
Queue Length 50th (ft)		5			11	0		56			29	
Queue Length 95th (ft)		14			27	4		92			50	
Internal Link Dist (ft)		400			392			1345			379	
Turn Bay Length (ft)												
Base Capacity (vph)		2168			1199	1043		1074			1147	
Starvation Cap Reductn		0			0	0		0			0	
Spillback Cap Reductn		0			0	0		0			0	
Storage Cap Reductn		0			0	0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.07			0.11	0.02		0.31			0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 29 (48%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 12.3		Intersection LOS: B	
Intersection Capacity Utilization 57.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 54: Cherry St & Houston St



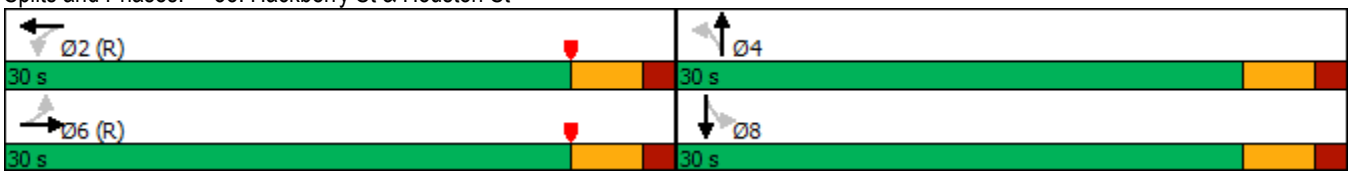


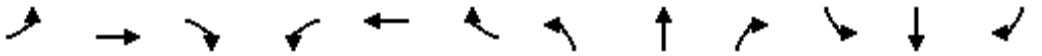
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	109	6	27	120	14	16	194	40	25	89	7
Future Volume (vph)	10	109	6	27	120	14	16	194	40	25	89	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3489	0	0	3452	0	0	3420	0	0	3463	0
Flt Permitted		0.938			0.911			0.929			0.842	
Satd. Flow (perm)	0	3279	0	0	3157	0	0	3182	0	0	2932	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			15			43			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		467			472			521			463	
Travel Time (s)		10.6			10.7			11.8			10.5	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	136	0	0	174	0	0	271	0	0	132	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-0.7			-0.7			-0.7			-0.7	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		43.2			43.2			8.8			8.8	
Actuated g/C Ratio		0.72			0.72			0.15			0.15	
v/c Ratio		0.06			0.08			0.54			0.30	
Control Delay		2.0			4.3			23.7			22.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		2.0			4.3			23.7			22.7	
LOS		A			A			C			C	
Approach Delay		2.0			4.3			23.7			22.7	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		3			12			41			21	
Queue Length 95th (ft)		6			27			68			41	
Internal Link Dist (ft)		387			392			441			383	
Turn Bay Length (ft)												
Base Capacity (vph)		2364			2278			1403			1275	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.06			0.08			0.19			0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 55 (92%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 14.6		Intersection LOS: B	
Intersection Capacity Utilization 42.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 55: Hackberry St & Houston St





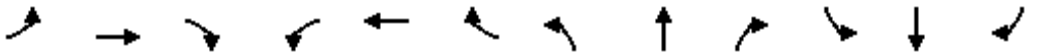
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	145	9	4	150	25	2	48	9	17	40	8
Future Volume (vph)	8	145	9	4	150	25	2	48	9	17	40	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1838	0	1770	1804	0	0	1795	0	0	1795	0
Flt Permitted	0.638			0.651				0.991			0.926	
Satd. Flow (perm)	1137	1838	0	1159	1804	0	0	1780	0	0	1657	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			27			10			9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		483			2799			472			467	
Travel Time (s)		11.0			63.6			10.7			10.6	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	168	0	4	190	0	0	64	0	0	70	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		13.0	13.0		13.0	13.0	
Total Split (s)	42.0	42.0		42.0	42.0		18.0	18.0		18.0	18.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-0.4	-0.4		-0.4	-0.4			-0.4			-0.4	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.3			4.3	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)	50.5	50.5		50.5	50.5			7.1			7.1	
Actuated g/C Ratio	0.84	0.84		0.84	0.84			0.12			0.12	
v/c Ratio	0.01	0.11		0.00	0.12			0.29			0.34	
Control Delay	4.9	4.7		2.2	2.0			24.5			26.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	4.9	4.7		2.2	2.0			24.5			26.4	
LOS	A	A		A	A			C			C	
Approach Delay		4.7			2.0			24.5			26.4	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)	1	18		0	11			18			21	
Queue Length 95th (ft)	6	39		2	29			47			52	
Internal Link Dist (ft)		403			2719			392			387	
Turn Bay Length (ft)				150								
Base Capacity (vph)	956	1548		975	1522			414			385	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.01	0.11		0.00	0.12			0.15			0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 34 (57%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 9.2		Intersection LOS: A	
Intersection Capacity Utilization 31.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 56: Pine St & Houston St



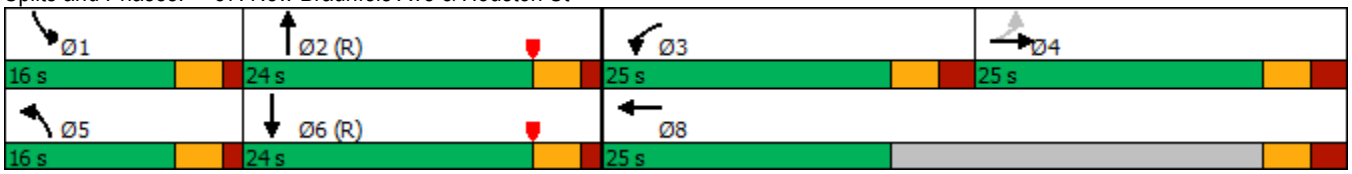


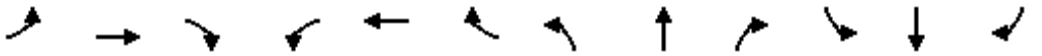
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	82	26	35	102	62	34	477	36	18	299	56
Future Volume (vph)	44	82	26	35	102	62	34	477	36	18	299	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	220		0	220		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1796	0	1770	1758	0	1770	3500	0	1770	3454	0
Flt Permitted	0.645			0.950			0.950			0.950		
Satd. Flow (perm)	1201	1796	0	1770	1758	0	1770	3500	0	1770	3454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			49			8			22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2799			1494			922			669	
Travel Time (s)		63.6			34.0			21.0			15.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	117	0	38	178	0	37	557	0	20	386	0
Turn Type	Perm	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4											
Detector Phase	4	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		3.0	10.0		3.0	10.0	
Minimum Split (s)	20.0	20.0		15.0	20.0		15.0	20.0		15.0	20.0	
Total Split (s)	25.0	25.0		25.0	25.0		16.0	24.0		16.0	24.0	
Total Split (%)	27.8%	27.8%		27.8%	27.8%		17.8%	26.7%		17.8%	26.7%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	2.5	2.5		2.5	2.5		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-1.7	-1.7		-1.7	-1.7		-0.6	-0.6		-0.6	-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	10.6	10.6		6.7	17.6		5.5	60.4		4.7	58.0	
Actuated g/C Ratio	0.12	0.12		0.07	0.20		0.06	0.67		0.05	0.64	
v/c Ratio	0.34	0.52		0.29	0.46		0.34	0.24		0.22	0.17	
Control Delay	42.0	39.8		43.9	27.6		48.3	8.4		45.7	8.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	42.0	39.8		43.9	27.6		48.3	8.4		45.7	8.8	
LOS	D	D		D	C		D	A		D	A	
Approach Delay		40.5			30.5			10.9			10.6	
Approach LOS		D			C			B			B	
Queue Length 50th (ft)	26	55		22	76		21	54		11	47	
Queue Length 95th (ft)	57	103		54	121		50	132		34	91	
Internal Link Dist (ft)		2719			1414			842			589	
Turn Bay Length (ft)	150			150			220			220		
Base Capacity (vph)	280	431		413	922		236	2353		236	2235	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.17	0.27		0.09	0.19		0.16	0.24		0.08	0.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 55 (61%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 17.4		Intersection LOS: B	
Intersection Capacity Utilization 43.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 57: New Braunfels Ave & Houston St





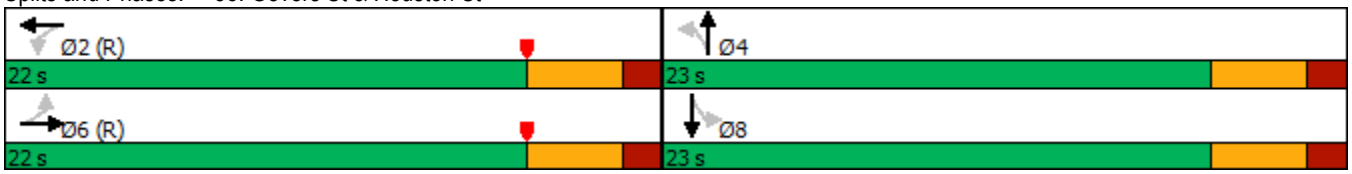
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	127	4	10	163	8	18	43	11	6	36	6
Future Volume (vph)	4	127	4	10	163	8	18	43	11	6	36	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1852	0	1770	1844	0	0	1786	0	0	1803	0
Flt Permitted	0.640			0.666				0.897			0.952	
Satd. Flow (perm)	1156	1852	0	1200	1844	0	0	1607	0	0	1721	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			7			12			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1494			1426			502			301	
Travel Time (s)		34.0			32.4			11.4			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	142	0	11	186	0	0	79	0	0	53	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		12.0	12.0		12.0	12.0	
Total Split (s)	22.0	22.0		22.0	22.0		23.0	23.0		23.0	23.0	
Total Split (%)	48.9%	48.9%		48.9%	48.9%		51.1%	51.1%		51.1%	51.1%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3		1.3	1.3		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-0.5	-0.5		-0.5	-0.5			-0.6			-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)	35.8	35.8		35.8	35.8			7.1			7.1	
Actuated g/C Ratio	0.80	0.80		0.80	0.80			0.16			0.16	
v/c Ratio	0.00	0.10		0.01	0.13			0.30			0.19	
Control Delay	1.8	1.4		1.5	1.5			17.8			16.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	1.8	1.4		1.5	1.5			17.8			16.4	
LOS	A	A		A	A			B			B	
Approach Delay		1.4			1.5			17.8			16.4	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)	0	3		1	9			16			11	
Queue Length 95th (ft)	m2	23		m1	13			42			31	
Internal Link Dist (ft)		1414			1346			422			221	
Turn Bay Length (ft)	150			150								
Base Capacity (vph)	919	1473		954	1467			685			730	

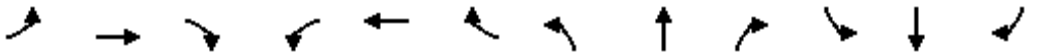
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.00	0.10		0.01	0.13			0.12			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 35 (78%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay: 5.8		Intersection LOS: A	
Intersection Capacity Utilization 33.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 58: Gevers St & Houston St



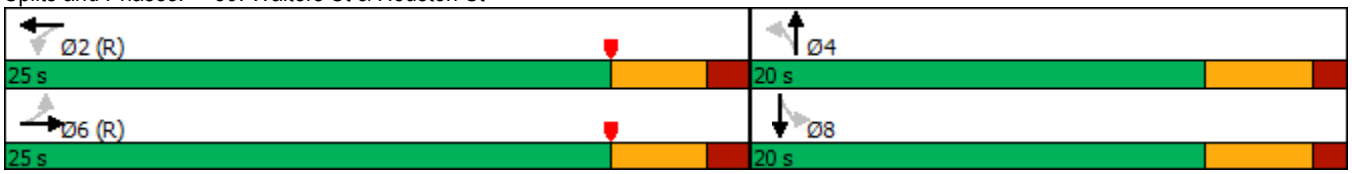


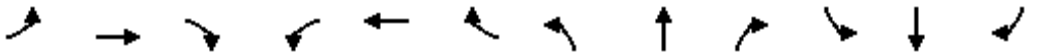
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	113	14	14	161	105	5	361	19	65	369	27
Future Volume (vph)	39	113	14	14	161	105	5	361	19	65	369	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1827	0	1770	1731	0	0	3496	0	0	3470	0
Flt Permitted	0.582			0.669				0.948			0.838	
Satd. Flow (perm)	1070	1827	0	1225	1731	0	0	3317	0	0	2918	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			98			13			15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1426			746			543			299	
Travel Time (s)		32.4			17.0			12.3			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	138	0	15	289	0	0	418	0	0	501	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		14.8	14.8		14.8	14.8	
Total Split (s)	25.0	25.0		25.0	25.0		20.0	20.0		20.0	20.0	
Total Split (%)	55.6%	55.6%		55.6%	55.6%		44.4%	44.4%		44.4%	44.4%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.2	1.2		1.2	1.2	
Lost Time Adjust (s)	-0.7	-0.7		-0.7	-0.7			-0.8			-0.8	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)	23.8	23.8		23.8	23.8			13.2			13.2	
Actuated g/C Ratio	0.53	0.53		0.53	0.53			0.29			0.29	
v/c Ratio	0.07	0.14		0.02	0.30			0.43			0.58	
Control Delay	8.9	7.8		8.3	7.5			13.4			15.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	8.9	7.8		8.3	7.5			13.4			15.6	
LOS	A	A		A	A			B			B	
Approach Delay		8.1			7.5			13.4			15.6	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)	10	32		2	37			44			56	
Queue Length 95th (ft)	30	71		12	91			63			79	
Internal Link Dist (ft)		1346			666			463			219	
Turn Bay Length (ft)	150			150								
Base Capacity (vph)	570	981		653	969			1199			1057	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.07	0.14		0.02	0.30			0.35			0.47	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 5 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 12.2		Intersection LOS: B	
Intersection Capacity Utilization 63.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 59: Walters St & Houston St





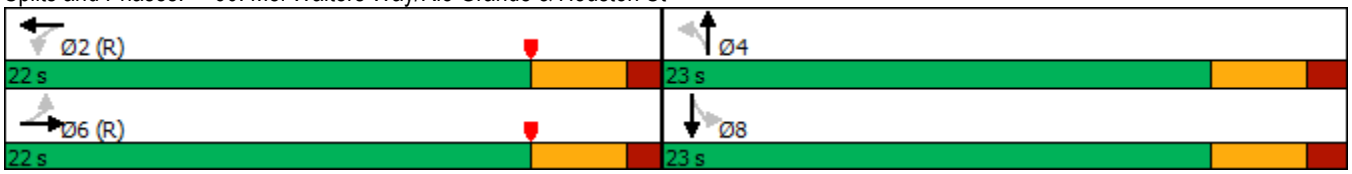
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	155	17	11	218	18	19	41	25	14	32	13
Future Volume (vph)	17	155	17	11	218	18	19	41	25	14	32	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1824	0	1770	1832	0	0	1741	0	0	1763	0
Flt Permitted	0.600			0.640				0.904			0.938	
Satd. Flow (perm)	1087	1824	0	1156	1832	0	0	1579	0	0	1661	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			11			27			14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		799			1332			494			300	
Travel Time (s)		18.2			30.3			11.2			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	186	0	12	257	0	0	93	0	0	64	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		12.0	12.0		12.0	12.0	
Total Split (s)	22.0	22.0		22.0	22.0		23.0	23.0		23.0	23.0	
Total Split (%)	48.9%	48.9%		48.9%	48.9%		51.1%	51.1%		51.1%	51.1%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-0.4	-0.4		-0.4	-0.4			-0.6			-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)	35.7	35.7		35.7	35.7			7.2			7.2	
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.16			0.16	
v/c Ratio	0.02	0.13		0.01	0.18			0.34			0.23	
Control Delay	2.6	2.4		3.0	3.0			16.3			15.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	2.6	2.4		3.0	3.0			16.3			15.6	
LOS	A	A		A	A			B			B	
Approach Delay		2.4			3.0			16.3			15.6	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)	1	6		1	17			16			12	
Queue Length 95th (ft)	m4	16		5	44			44			34	
Internal Link Dist (ft)		719			1252			414			220	
Turn Bay Length (ft)	150			150								
Base Capacity (vph)	861	1448		916	1454			682			709	

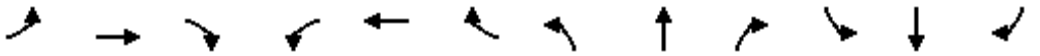
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.02	0.13		0.01	0.18			0.14			0.09	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 5 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 6.0		Intersection LOS: A	
Intersection Capacity Utilization 32.9%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 60: Mel Waiters Way/Rio Grande & Houston St





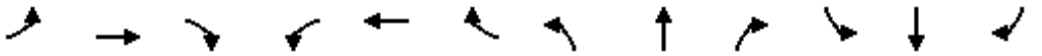
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	230	17	90	295	4	14	4	133	4	4	4
Future Volume (vph)	4	230	17	90	295	4	14	4	133	4	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		0	250		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3504	0	1770	3532	0	0	1792	1583	0	3308	0
Flt Permitted	0.555			0.587							0.955	
Satd. Flow (perm)	1034	3504	0	1093	3532	0	0	1863	1583	0	3211	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			2				209		4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1094			1140			730			346	
Travel Time (s)		24.9			25.9			16.6			7.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	268	0	98	325	0	0	19	145	0	12	0
Turn Type	D.P+P	NA		Perm	NA		Perm	NA	Free	Perm	NA	
Protected Phases	1	6			2			4			8	
Permitted Phases	2			2			4		Free	8		
Detector Phase	1	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	11.0	28.0		18.0	18.0		14.0	14.0		14.0	14.0	
Total Split (s)	15.0	40.0		25.0	25.0		20.0	20.0		20.0	20.0	
Total Split (%)	25.0%	66.7%		41.7%	41.7%		33.3%	33.3%		33.3%	33.3%	
Yellow Time (s)	3.0	3.9		3.9	3.9		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-0.2	-1.1		-1.1	-1.1			-1.2			-1.2	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)	53.0	57.0		55.5	55.5			7.2	60.0		7.2	
Actuated g/C Ratio	0.88	0.95		0.92	0.92			0.12	1.00		0.12	
v/c Ratio	0.00	0.08		0.10	0.10			0.09	0.09		0.03	
Control Delay	1.2	0.7		2.3	1.6			24.6	0.1		20.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	1.2	0.7		2.3	1.6			24.6	0.1		20.3	
LOS	A	A		A	A			C	A		C	
Approach Delay		0.7			1.7			2.9			20.3	
Approach LOS		A			A			A			C	
Queue Length 50th (ft)	0	0		0	0			6	0		1	
Queue Length 95th (ft)	2	15		29	35			23	0		7	
Internal Link Dist (ft)		1014			1060			650			266	
Turn Bay Length (ft)	240			250								
Base Capacity (vph)	1061	3327		1011	3266			496	1583		859	
Starvation Cap Reductn	0	0		0	0			0	0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.00	0.08		0.10	0.10			0.04	0.09		0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 40 (67%), Referenced to phase 2:EBWB and 6:EBT, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.10			
Intersection Signal Delay: 1.9		Intersection LOS: A	
Intersection Capacity Utilization 34.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 61: Coca-Cola Pl & Houston St



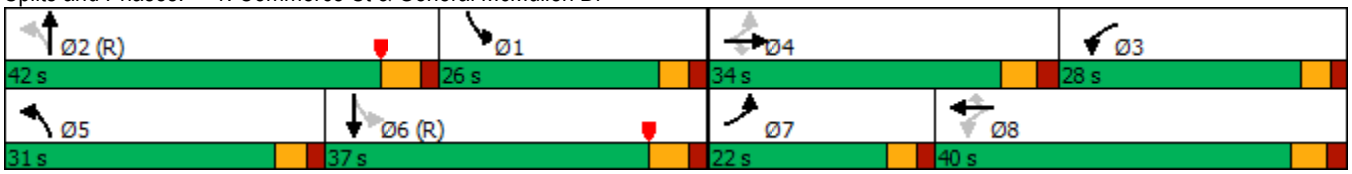


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	436	239	203	580	217	308	866	156	199	932	191
Future Volume (vph)	211	436	239	203	580	217	308	866	156	199	932	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	220		220	240		240	230		0	220		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	4968	0	1770	4953	0
Flt Permitted	0.364			0.481			0.292			0.274		
Satd. Flow (perm)	678	3539	1583	896	3539	1583	544	4968	0	510	4953	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			260			236		28			32	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		692			1303			879			693	
Travel Time (s)		15.7			29.6			20.0			15.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	229	474	260	221	630	236	335	1111	0	216	1221	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	6.0	6.0	3.0	6.0	6.0	3.0	10.0		3.0	10.0	
Minimum Split (s)	17.0	24.0	24.0	20.0	25.0	25.0	22.0	25.0		18.0	25.0	
Total Split (s)	22.0	34.0	34.0	28.0	40.0	40.0	31.0	42.0		26.0	37.0	
Total Split (%)	16.9%	26.2%	26.2%	21.5%	30.8%	30.8%	23.8%	32.3%		20.0%	28.5%	
Yellow Time (s)	3.0	3.6	3.6	3.0	3.6	3.6	3.0	3.9		3.0	3.9	
All-Red Time (s)	1.7	2.1	2.1	1.7	2.1	2.1	1.8	1.8		1.8	1.8	
Lost Time Adjust (s)	-0.7	-1.7	-1.7	-0.7	-1.7	-1.7	-0.8	-1.7		-0.8	-1.7	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	Max	Max	Max	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	31.3	31.3	31.3	29.2	29.2	29.2	39.1	39.1		40.9	40.9	
Actuated g/C Ratio	0.24	0.24	0.24	0.22	0.22	0.22	0.30	0.30		0.31	0.31	
v/c Ratio	0.70	0.56	0.45	0.70	0.79	0.44	0.85	0.73		0.52	0.77	
Control Delay	56.5	46.6	7.4	67.7	62.2	16.6	60.0	43.2		48.2	44.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.5	46.6	7.4	67.7	62.2	16.6	60.0	43.2		48.2	44.2	
LOS	E	D	A	E	E	B	E	D		D	D	
Approach Delay		38.4			53.4			47.1			44.8	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	172	187	0	188	297	30	243	299		142	334	
Queue Length 95th (ft)	#276	246	71	265	353	116	#372	360		237	#461	
Internal Link Dist (ft)		612			1223			799			613	
Turn Bay Length (ft)	220		220	240		240	230			220		
Base Capacity (vph)	325	853	579	409	980	609	424	1512		416	1581	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.70	0.56	0.45	0.54	0.64	0.39	0.79	0.73		0.52	0.77	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow, Master Intersection			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 46.1		Intersection LOS: D	
Intersection Capacity Utilization 80.4%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Commerce St & General McMullen Dr



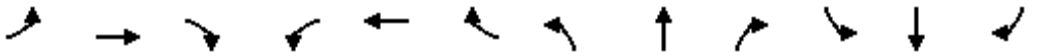
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	686	19	33	1040	8	28
Future Volume (vph)	686	19	33	1040	8	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	150		150	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Satd. Flow (prot)	3525	0	1770	3539	1575	0
Flt Permitted			0.342		0.989	
Satd. Flow (perm)	3525	0	637	3539	1557	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	4				30	
Link Speed (mph)	30			30	30	
Link Distance (ft)	1303			798	530	
Travel Time (s)	29.6			18.1	12.0	
Confl. Peds. (#/hr)					30	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	767	0	36	1130	39	0
Turn Type	NA		pm+pt	NA	Prot	
Protected Phases	6		5	2	4	
Permitted Phases			2			
Detector Phase	6		5	2	4	
Switch Phase						
Minimum Initial (s)	10.0		3.0	10.0	3.0	
Minimum Split (s)	25.0		15.0	25.0	21.0	
Total Split (s)	80.0		20.0	100.0	30.0	
Total Split (%)	61.5%		15.4%	76.9%	23.1%	
Yellow Time (s)	3.6		3.0	3.6	3.2	
All-Red Time (s)	1.0		1.5	1.0	2.1	
Lost Time Adjust (s)	-0.6		-0.5	-0.6	-1.3	
Total Lost Time (s)	4.0		4.0	4.0	4.0	
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	C-Min		None	C-Min	None	
Act Effct Green (s)	113.6		117.6	118.4	6.2	
Actuated g/C Ratio	0.87		0.90	0.91	0.05	
v/c Ratio	0.25		0.06	0.35	0.38	
Control Delay	4.0		0.5	0.7	35.7	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	4.0		0.5	0.7	35.7	
LOS	A		A	A	D	
Approach Delay	4.0			0.7	35.7	
Approach LOS	A			A	D	
Queue Length 50th (ft)	8		0	1	7	
Queue Length 95th (ft)	263		3	24	45	
Internal Link Dist (ft)	1223			718	450	
Turn Bay Length (ft)			150		150	
Base Capacity (vph)	3080		715	3222	339	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	0		0	0	0	
Spillback Cap Reductn	0		0	0	0	
Storage Cap Reductn	0		0	0	0	
Reduced v/c Ratio	0.25		0.05	0.35	0.12	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 109 (84%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 2.7		Intersection LOS: A	
Intersection Capacity Utilization 49.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: 29th St & Commerce St





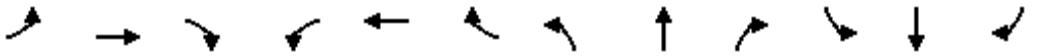
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	730	12	6	1017	11	0	0	0	33	4	57
Future Volume (vph)	14	730	12	6	1017	11	0	0	0	33	4	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	150		0	0		0	150		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3532	0	1770	3532	0	0	0	0	1770	1459	0
Flt Permitted	0.239			0.342						0.950		
Satd. Flow (perm)	445	3532	0	637	3532	0	0	0	0	1622	1459	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			2						62	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		798			1731			484			302	
Travel Time (s)		18.1			39.3			11.0			6.9	
Confl. Peds. (#/hr)							30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	806	0	7	1117	0	0	0	0	36	66	0
Turn Type	pm+pt	NA		pm+pt	NA					Perm	NA	
Protected Phases	1	6		5	2						8	
Permitted Phases	6			2						8		
Detector Phase	1	6		5	2					8	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0		5.0	10.0					6.0	6.0	
Minimum Split (s)	12.0	25.0		9.0	25.0					20.0	20.0	
Total Split (s)	15.0	91.0		9.0	85.0					30.0	30.0	
Total Split (%)	11.5%	70.0%		6.9%	65.4%					23.1%	23.1%	
Yellow Time (s)	3.0	3.6		3.5	3.6					3.2	3.2	
All-Red Time (s)	1.2	1.0		0.5	1.0					2.1	2.1	
Lost Time Adjust (s)	-0.2	-0.6		-0.6	-0.6					-1.3	-1.3	
Total Lost Time (s)	4.0	4.0		3.4	4.0					4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min					None	None	
Act Effct Green (s)	114.7	114.7		115.8	113.5					8.4	8.4	
Actuated g/C Ratio	0.88	0.88		0.89	0.87					0.06	0.06	
v/c Ratio	0.03	0.26		0.01	0.36					0.35	0.43	
Control Delay	1.1	1.5		1.2	2.7					66.8	24.2	
Queue Delay	0.0	0.0		0.0	0.0					0.0	0.0	
Total Delay	1.1	1.5		1.2	2.7					66.8	24.2	
LOS	A	A		A	A					E	C	
Approach Delay		1.5			2.7						39.3	
Approach LOS		A			A						D	
Queue Length 50th (ft)	1	23		1	57					30	3	
Queue Length 95th (ft)	3	88		2	150					65	49	
Internal Link Dist (ft)		718			1651			404			222	
Turn Bay Length (ft)	130			150						150		
Base Capacity (vph)	508	3117		620	3082					324	341	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0					0	0	
Spillback Cap Reductn	0	0		0	0					0	0	
Storage Cap Reductn	0	0		0	0					0	0	
Reduced v/c Ratio	0.03	0.26		0.01	0.36					0.11	0.19	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 88 (68%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 4.0		Intersection LOS: A	
Intersection Capacity Utilization 44.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Matyear St & Commerce St



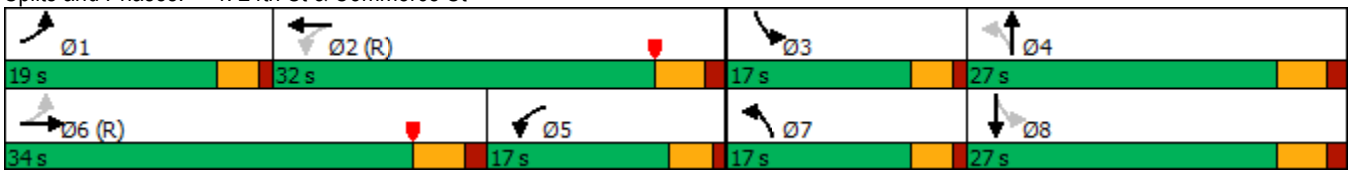


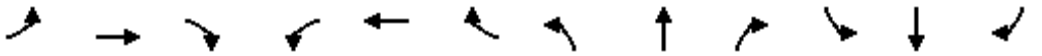
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	410	101	200	759	100	150	209	118	28	126	83
Future Volume (vph)	210	410	101	200	759	100	150	209	118	28	126	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	150		0	150		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3396	0	1770	3454	0	1770	3283	0	1770	3259	0
Flt Permitted	0.174			0.444			0.339			0.539		
Satd. Flow (perm)	322	3396	0	811	3454	0	612	3283	0	981	3259	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33			15			108			90	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1731			463			490			331	
Travel Time (s)		39.3			10.5			11.1			7.5	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	228	556	0	217	934	0	163	355	0	30	227	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0		3.0	6.0		3.0	6.0	
Minimum Split (s)	15.0	24.0		14.0	22.0		14.0	19.0		14.0	19.0	
Total Split (s)	19.0	34.0		17.0	32.0		17.0	27.0		17.0	27.0	
Total Split (%)	20.0%	35.8%		17.9%	33.7%		17.9%	28.4%		17.9%	28.4%	
Yellow Time (s)	3.0	3.6		3.0	3.6		3.0	3.6		3.0	3.6	
All-Red Time (s)	1.0	1.5		1.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	-1.1		0.0	-1.1		0.0	-1.1		0.0	-1.1	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	37.6	37.6		47.8	47.8		23.3	17.9		13.3	9.0	
Actuated g/C Ratio	0.40	0.40		0.50	0.50		0.25	0.19		0.14	0.09	
v/c Ratio	0.74	0.41		0.34	0.54		0.59	0.50		0.17	0.58	
Control Delay	36.9	21.6		20.9	19.1		37.9	26.4		28.2	30.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	36.9	21.6		20.9	19.1		37.9	26.4		28.2	30.5	
LOS	D	C		C	B		D	C		C	C	
Approach Delay		26.1			19.5			30.0			30.2	
Approach LOS		C			B			C			C	
Queue Length 50th (ft)	95	118		70	187		82	72		14	42	
Queue Length 95th (ft)	170	178		150	318		128	112		33	76	
Internal Link Dist (ft)		1651			383			410			251	
Turn Bay Length (ft)	160			150			150			100		
Base Capacity (vph)	365	1364		630	1743		308	876		329	857	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.62	0.41		0.34	0.54		0.53	0.41		0.09	0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 24 (25%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 24.4		Intersection LOS: C	
Intersection Capacity Utilization 71.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: 24th St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	62	1019	23	48	44	0	0	49	23
Future Volume (vph)	0	0	0	62	1019	23	48	44	0	0	49	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		130	150		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	3529	1583	1770	1863	0	0	1783	0
Flt Permitted					0.997		0.706					
Satd. Flow (perm)	0	0	0	0	3516	1455	1315	1863	0	0	1783	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						25					25	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		383			1482			392			323	
Travel Time (s)		8.7			33.7			8.9			7.3	
Confl. Peds. (#/hr)				30		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1175	25	52	48	0	0	78	0
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				25.0	25.0	25.0	17.0	17.0			17.0	
Total Split (s)				53.0	53.0	53.0	22.0	22.0			22.0	
Total Split (%)				70.7%	70.7%	70.7%	29.3%	29.3%			29.3%	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.8	-0.8	-0.6	-0.6			-0.6	
Total Lost Time (s)					4.0	4.0	4.0	4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Min	C-Min	C-Min	None	None			None	
Act Effct Green (s)					62.1	62.1	7.9	7.9			7.9	
Actuated g/C Ratio					0.83	0.83	0.11	0.11			0.11	
v/c Ratio					0.40	0.02	0.38	0.25			0.37	
Control Delay					5.9	2.9	28.9	23.3			27.8	
Queue Delay					0.0	0.0	0.0	0.0			0.0	
Total Delay					5.9	2.9	28.9	23.3			27.8	
LOS					A	A	C	C			C	
Approach Delay					5.8			26.2			27.8	
Approach LOS					A			C			C	
Queue Length 50th (ft)					150	2	10	10			24	
Queue Length 95th (ft)					172	m5	56	51			60	
Internal Link Dist (ft)		303			1402			312			243	
Turn Bay Length (ft)						130	150					
Base Capacity (vph)					2909	1208	315	447			446	

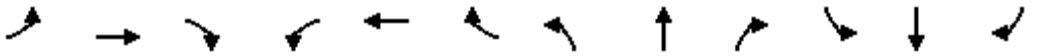
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0	0	0			0	
Spillback Cap Reductn					0	0	0	0			0	
Storage Cap Reductn					0	0	0	0			0	
Reduced v/c Ratio					0.40	0.02	0.17	0.11			0.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 18 (24%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 8.5		Intersection LOS: A	
Intersection Capacity Utilization 46.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: 19th St & Commerce St



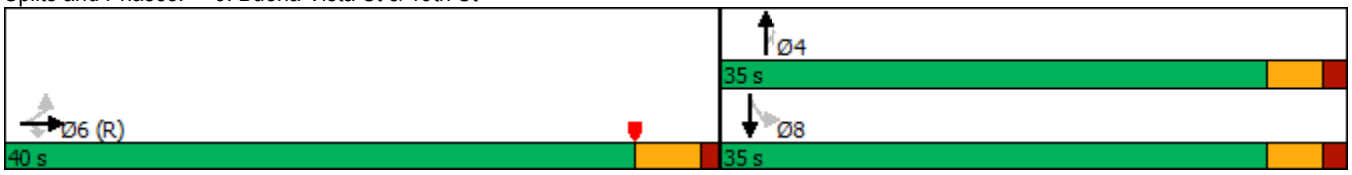


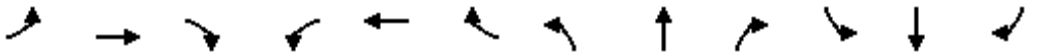
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	444	34	0	0	0	0	79	29	23	86	0
Future Volume (vph)	15	444	34	0	0	0	0	79	29	23	86	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	150		0
Storage Lanes	0		1	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3532	1583	0	0	0	0	1863	1583	0	1844	0
Flt Permitted		0.998									0.944	
Satd. Flow (perm)	0	3529	1583	0	0	0	0	1863	1583	0	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			37						32			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		532			1485			389			392	
Travel Time (s)		12.1			33.8			8.8			8.9	
Confl. Peds. (#/hr)	30											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	499	37	0	0	0	0	86	32	0	118	0
Turn Type	Perm	NA	Perm					NA	Perm	Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6						4	8		
Detector Phase	6	6	6					4	4	8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					6.0	6.0	6.0	6.0	
Minimum Split (s)	25.0	25.0	25.0					18.0	18.0	18.0	18.0	
Total Split (s)	40.0	40.0	40.0					35.0	35.0	35.0	35.0	
Total Split (%)	53.3%	53.3%	53.3%					46.7%	46.7%	46.7%	46.7%	
Yellow Time (s)	3.6	3.6	3.6					3.2	3.2	3.2	3.2	
All-Red Time (s)	1.2	1.2	1.2					1.4	1.4	1.4	1.4	
Lost Time Adjust (s)		-0.8	-0.8					-0.6	0.0		-0.6	
Total Lost Time (s)		4.0	4.0					4.0	4.6		4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max	C-Max					Max	Max	Max	Max	
Act Effct Green (s)		36.0	36.0					31.0	30.4		31.0	
Actuated g/C Ratio		0.48	0.48					0.41	0.41		0.41	
v/c Ratio		0.29	0.05					0.11	0.05		0.16	
Control Delay		12.4	4.0					14.1	5.6		17.0	
Queue Delay		0.0	0.0					0.0	0.0		0.0	
Total Delay		12.4	4.0					14.1	5.6		17.0	
LOS		B	A					B	A		B	
Approach Delay		11.8						11.8			17.0	
Approach LOS		B						B			B	
Queue Length 50th (ft)		70	0					24	0		26	
Queue Length 95th (ft)		101	14					50	15		77	
Internal Link Dist (ft)		452			1405			309			312	
Turn Bay Length (ft)			150									
Base Capacity (vph)		1693	779					770	660		726	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0	0		0	
Spillback Cap Reductn		0	0					0	0		0	
Storage Cap Reductn		0	0					0	0		0	
Reduced v/c Ratio		0.29	0.05					0.11	0.05		0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 46 (61%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay: 12.6		Intersection LOS: B	
Intersection Capacity Utilization 34.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: Buena Vista St & 19th St





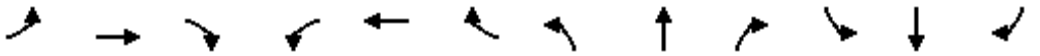
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	60	1051	36	33	80	0	0	67	19
Future Volume (vph)	0	0	0	60	1051	36	33	80	0	0	67	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		130	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	3529	1583	0	1837	0	0	1807	0
Flt Permitted					0.997			0.895				
Satd. Flow (perm)	0	0	0	0	3529	1583	0	1667	0	0	1807	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						39					17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1482			1455			390			326	
Travel Time (s)		33.7			33.1			8.9			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1207	39	0	123	0	0	94	0
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				25.0	25.0	25.0	15.0	15.0			15.0	
Total Split (s)				56.0	56.0	56.0	19.0	19.0			19.0	
Total Split (%)				74.7%	74.7%	74.7%	25.3%	25.3%			25.3%	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Act Effct Green (s)					52.0	52.0		15.0			15.0	
Actuated g/C Ratio					0.69	0.69		0.20			0.20	
v/c Ratio					0.49	0.04		0.37			0.25	
Control Delay					3.4	0.1		23.4			23.2	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					3.4	0.1		23.4			23.2	
LOS					A	A		C			C	
Approach Delay					3.3			23.4			23.2	
Approach LOS					A			C			C	
Queue Length 50th (ft)					22	0		50			30	
Queue Length 95th (ft)					34	m0		97			69	
Internal Link Dist (ft)		1402			1375			310			246	
Turn Bay Length (ft)						130						
Base Capacity (vph)					2446	1109		333			375	
Starvation Cap Reductn					0	0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn					0	0		0			0	
Storage Cap Reductn					0	0		0			0	
Reduced v/c Ratio					0.49	0.04		0.37			0.25	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 66 (88%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 6.3		Intersection LOS: A	
Intersection Capacity Utilization 50.2%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 7: Hamilton Ave & Commerce St





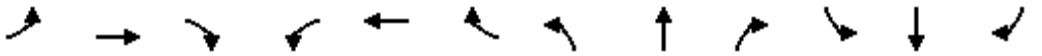
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	474	34	0	0	0	0	64	61	7	33	0
Future Volume (vph)	13	474	34	0	0	0	0	64	61	7	33	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3536	1583	0	0	0	0	1740	0	0	1846	0
Flt Permitted		0.999									0.869	
Satd. Flow (perm)	0	3536	1583	0	0	0	0	1740	0	0	1619	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			37					60				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1485			1450			392			390	
Travel Time (s)		33.8			33.0			8.9			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	529	37	0	0	0	0	136	0	0	44	0
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Detector Phase	6	6	6					4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					6.0		6.0	6.0	
Minimum Split (s)	25.0	25.0	25.0					17.0		17.0	17.0	
Total Split (s)	53.0	53.0	53.0					22.0		22.0	22.0	
Total Split (%)	70.7%	70.7%	70.7%					29.3%		29.3%	29.3%	
Yellow Time (s)	3.6	3.6	3.6					3.2		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0					1.4		1.2	1.2	
Lost Time Adjust (s)		-0.6	-0.6					-0.6			-0.4	
Total Lost Time (s)		4.0	4.0					4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min	C-Min					None		None	None	
Act Effct Green (s)		61.5	61.5					8.4			8.4	
Actuated g/C Ratio		0.82	0.82					0.11			0.11	
v/c Ratio		0.18	0.03					0.55			0.24	
Control Delay		9.7	7.2					26.8			31.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		9.7	7.2					26.8			31.7	
LOS		A	A					C			C	
Approach Delay		9.5						26.8			31.7	
Approach LOS		A						C			C	
Queue Length 50th (ft)		94	1					34			20	
Queue Length 95th (ft)		146	27					81			m42	
Internal Link Dist (ft)		1405			1370			312			310	
Turn Bay Length (ft)			150									
Base Capacity (vph)		2900	1305					463			388	
Starvation Cap Reductn		0	0					0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	0					0			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.18	0.03					0.29			0.11	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 7 (9%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 14.0		Intersection LOS: B	
Intersection Capacity Utilization 27.9%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 8: Buena Vista St & Hamilton Ave



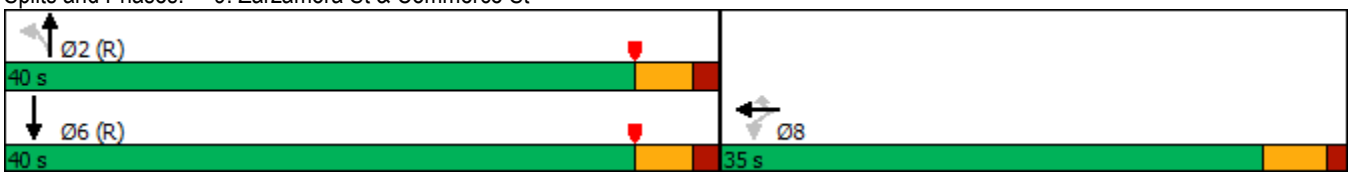


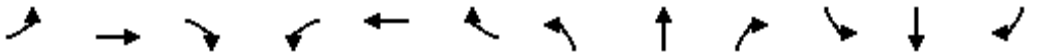
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	170	979	185	104	707	0	0	569	122
Future Volume (vph)	0	0	0	170	979	185	104	707	0	0	569	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	0	3514	1583	0	3518	0	0	3444	0
Flt Permitted					0.993			0.712				
Satd. Flow (perm)	0	0	0	0	3491	1495	0	2520	0	0	3444	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						132					27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1455			747			389			155	
Travel Time (s)		33.1			17.0			8.8			3.5	
Confl. Peds. (#/hr)				30		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1249	201	0	881	0	0	751	0
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2					
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				6.0	6.0	6.0	10.0	10.0			10.0	
Minimum Split (s)				25.0	25.0	25.0	25.0	25.0			25.0	
Total Split (s)				35.0	35.0	35.0	40.0	40.0			40.0	
Total Split (%)				46.7%	46.7%	46.7%	53.3%	53.3%			53.3%	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.6	1.6			1.6	
Lost Time Adjust (s)					-0.8	-0.8		-0.8			-0.8	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				None	None	None	C-Min	C-Min			C-Min	
Act Effct Green (s)					31.6	31.6		35.4			35.4	
Actuated g/C Ratio					0.42	0.42		0.47			0.47	
v/c Ratio					0.85	0.28		0.74			0.46	
Control Delay					30.3	9.8		23.6			14.1	
Queue Delay					0.0	0.0		0.1			0.0	
Total Delay					30.3	9.8		23.6			14.1	
LOS					C	A		C			B	
Approach Delay					27.5			23.6			14.1	
Approach LOS					C			C			B	
Queue Length 50th (ft)					251	42		198			122	
Queue Length 95th (ft)					#396	56		265			154	
Internal Link Dist (ft)		1375			667			309			75	
Turn Bay Length (ft)												
Base Capacity (vph)					1498	717		1229			1693	
Starvation Cap Reductn					0	0		15			0	
Spillback Cap Reductn					0	0		0			0	
Storage Cap Reductn					0	0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio					0.83	0.28		0.73			0.44	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 57 (76%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 23.1		Intersection LOS: C	
Intersection Capacity Utilization 84.2%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Zarzamora St & Commerce St





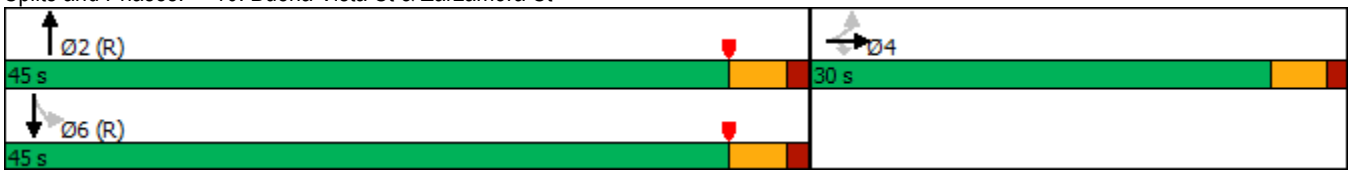
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	366	85	0	0	0	0	533	74	71	601	0
Future Volume (vph)	106	366	85	0	0	0	0	533	74	71	601	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3500	1583	0	0	0	0	3476	0	0	3522	0
Flt Permitted		0.989									0.821	
Satd. Flow (perm)	0	3465	1495	0	0	0	0	3476	0	0	2906	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			92					32				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1450			753			394			389	
Travel Time (s)		33.0			17.1			9.0			8.8	
Confl. Peds. (#/hr)	30		30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	513	92	0	0	0	0	659	0	0	730	0
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4		4							6		
Detector Phase	4	4	4					2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0					10.0		10.0	10.0	
Minimum Split (s)	25.0	25.0	25.0					25.0		25.0	25.0	
Total Split (s)	30.0	30.0	30.0					45.0		45.0	45.0	
Total Split (%)	40.0%	40.0%	40.0%					60.0%		60.0%	60.0%	
Yellow Time (s)	3.2	3.2	3.2					3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2	1.2					1.4		1.4	1.4	
Lost Time Adjust (s)		-0.4	-0.4					-0.6			-0.6	
Total Lost Time (s)		4.0	4.0					4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None					C-Min		C-Min	C-Min	
Act Effct Green (s)		15.3	15.3					51.7			51.7	
Actuated g/C Ratio		0.20	0.20					0.69			0.69	
v/c Ratio		0.73	0.24					0.27			0.36	
Control Delay		32.6	13.8					5.0			6.0	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		32.6	13.8					5.0			6.0	
LOS		C	B					A			A	
Approach Delay		29.7						5.0			6.0	
Approach LOS		C						A			A	
Queue Length 50th (ft)		136	10					47			85	
Queue Length 95th (ft)		184	62					88			m72	
Internal Link Dist (ft)		1370			673			314			309	
Turn Bay Length (ft)			150									
Base Capacity (vph)		1201	578					2407			2003	

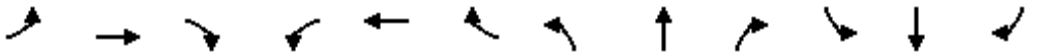
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					0			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.43	0.16					0.27			0.36	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 65 (87%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 12.9		Intersection LOS: B	
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Buena Vista St & Zarzamora St





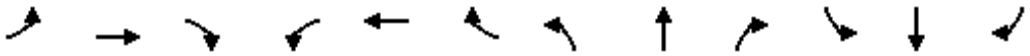
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	19	1121	169	26	55	0	0	61	68
Future Volume (vph)	0	0	0	19	1121	169	26	55	0	0	61	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	3536	1583	0	1833	0	0	1863	1583
Flt Permitted					0.999			0.869				
Satd. Flow (perm)	0	0	0	0	3536	1583	0	1619	0	0	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						184						74
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		747			708			395			185	
Travel Time (s)		17.0			16.1			9.0			4.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1239	184	0	88	0	0	66	74
Turn Type				Perm	NA	Perm	Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2		2	4					8
Detector Phase				2	2	2	4	4			8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	6.0
Minimum Split (s)				25.0	25.0	25.0	17.0	17.0			17.0	17.0
Total Split (s)				53.0	53.0	53.0	22.0	22.0			22.0	22.0
Total Split (%)				70.7%	70.7%	70.7%	29.3%	29.3%			29.3%	29.3%
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	3.2
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	1.4
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	-0.6
Total Lost Time (s)					4.0	4.0		4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Min	C-Min	C-Min	None	None			None	None
Act Effct Green (s)					61.5	61.5		8.4			8.4	8.4
Actuated g/C Ratio					0.82	0.82		0.11			0.11	0.11
v/c Ratio					0.43	0.14		0.49			0.32	0.30
Control Delay					6.5	2.6		34.2			34.0	11.4
Queue Delay					0.0	0.0		0.0			0.0	0.0
Total Delay					6.5	2.6		34.2			34.0	11.4
LOS					A	A		C			C	B
Approach Delay					6.0			34.2			22.0	
Approach LOS					A			C			C	
Queue Length 50th (ft)					176	15		31			29	0
Queue Length 95th (ft)					169	m29		62			62	34
Internal Link Dist (ft)		667			628			315			105	
Turn Bay Length (ft)						150						
Base Capacity (vph)					2899	1331		388			447	436
Starvation Cap Reductn					0	0		0			0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn					0	0		0			0	0
Storage Cap Reductn					0	0		0			0	0
Reduced v/c Ratio					0.43	0.14		0.23			0.15	0.17

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 20 (27%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 8.9		Intersection LOS: A	
Intersection Capacity Utilization 51.5%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

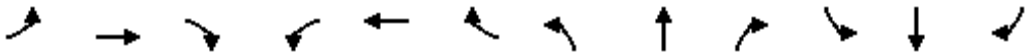
Splits and Phases: 11: Calaveras St & Commerce St





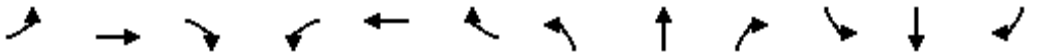
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	489	5	0	0	0	0	17	10	37	19	0
Future Volume (vph)	33	489	5	0	0	0	0	17	10	37	19	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3525	0	0	0	0	0	1768	0	0	1803	0
Flt Permitted		0.997									0.968	
Satd. Flow (perm)	0	3525	0	0	0	0	0	1768	0	0	1803	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		753			703			212			395	
Travel Time (s)		17.1			16.0			4.8			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	573	0	0	0	0	0	29	0	0	61	0
Sign Control		Free			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.0%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	12	1269	9	9	7	0	0	10	9
Future Volume (vph)	0	0	0	12	1269	9	9	7	0	0	10	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	0	3536	0	0	1812	0	0	1744	0
Flt Permitted								0.973				
Satd. Flow (perm)	0	0	0	0	3536	0	0	1812	0	0	1744	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		708			1095			391			285	
Travel Time (s)		16.1			24.9			8.9			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1402	0	0	18	0	0	21	0
Sign Control		Stop			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.9%		ICU Level of Service A	
Analysis Period (min) 15			



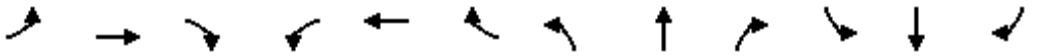
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	523	7	0	0	0	0	8	9	10	11	0
Future Volume (vph)	5	523	7	0	0	0	0	8	9	10	11	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		130	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	1583	0	0	0	0	1730	0	0	1820	0
Flt Permitted											0.906	
Satd. Flow (perm)	0	3539	1583	0	0	0	0	1730	0	0	1688	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			22					10				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		703			1448			392			391	
Travel Time (s)		16.0			32.9			8.9			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	573	8	0	0	0	0	19	0	0	23	0
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Detector Phase	6	6	6					4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					6.0		6.0	6.0	
Minimum Split (s)	25.0	25.0	25.0					15.0		15.0	15.0	
Total Split (s)	56.0	56.0	56.0					19.0		19.0	19.0	
Total Split (%)	74.7%	74.7%	74.7%					25.3%		25.3%	25.3%	
Yellow Time (s)	3.6	3.6	3.6					3.2		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0					1.3		1.3	1.3	
Lost Time Adjust (s)		-0.6	-0.6					-0.5			-0.5	
Total Lost Time (s)		4.0	4.0					4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max	C-Max					Max		Max	Max	
Act Effct Green (s)		52.0	52.0					15.0			15.0	
Actuated g/C Ratio		0.69	0.69					0.20			0.20	
v/c Ratio		0.23	0.01					0.05			0.07	
Control Delay		12.4	3.6					17.8			20.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		12.4	3.6					17.8			20.7	
LOS		B	A					B			C	
Approach Delay		12.2						17.8			20.7	
Approach LOS		B						B			C	
Queue Length 50th (ft)		118	1					3			9	
Queue Length 95th (ft)		148	m3					20			m19	
Internal Link Dist (ft)		623			1368			312			311	
Turn Bay Length (ft)			130									
Base Capacity (vph)		2453	1104					354			337	
Starvation Cap Reductn		0	0					0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	0					0			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.23	0.01					0.05			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 71 (95%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.23			
Intersection Signal Delay: 12.7		Intersection LOS: B	
Intersection Capacity Utilization 29.1%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 14: Navidad St & Buena Vista St





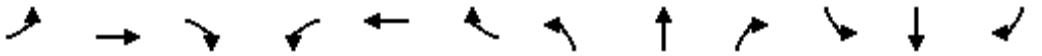
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	69	1174	22	105	57	0	0	55	11
Future Volume (vph)	0	0	0	69	1174	22	105	57	0	0	55	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		130	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	3529	1583	0	1805	0	0	1820	0
Flt Permitted					0.997			0.770				
Satd. Flow (perm)	0	0	0	0	3529	1583	0	1434	0	0	1820	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						24					12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1095			394			321	
Travel Time (s)		8.0			24.9			9.0			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1351	24	0	176	0	0	72	0
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				19.8	19.8	19.8	19.6	19.6			10.6	
Total Split (s)				49.0	49.0	49.0	26.0	26.0			26.0	
Total Split (%)				65.3%	65.3%	65.3%	34.7%	34.7%			34.7%	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Act Effct Green (s)					45.0	45.0		22.0			22.0	
Actuated g/C Ratio					0.60	0.60		0.29			0.29	
v/c Ratio					0.64	0.03		0.42			0.13	
Control Delay					4.1	0.4		25.3			17.7	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					4.1	0.4		25.3			17.7	
LOS					A	A		C			B	
Approach Delay					4.0			25.3			17.7	
Approach LOS					A			C			B	
Queue Length 50th (ft)					40	0		78			20	
Queue Length 95th (ft)					47	m1		137			50	
Internal Link Dist (ft)		272			1015			314			241	
Turn Bay Length (ft)						130						
Base Capacity (vph)					2117	959		420			542	
Starvation Cap Reductn					0	0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn					0	0		0			0	
Storage Cap Reductn					0	0		0			0	
Reduced v/c Ratio					0.64	0.03		0.42			0.13	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 49 (65%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 6.9		Intersection LOS: A	
Intersection Capacity Utilization 56.6%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 15: Trinity St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	497	64	0	0	0	0	103	23	13	85	0
Future Volume (vph)	9	497	64	0	0	0	0	103	23	13	85	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		130	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3536	1583	0	0	0	0	1816	0	0	1850	0
Flt Permitted		0.999									0.903	
Satd. Flow (perm)	0	3536	1443	0	0	0	0	1816	0	0	1682	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70					15				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1448			1104			389			394	
Travel Time (s)		32.9			25.1			8.8			9.0	
Confl. Peds. (#/hr)			30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	550	70	0	0	0	0	137	0	0	106	0
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Detector Phase	6	6	6					4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					6.0		6.0	6.0	
Minimum Split (s)	25.0	25.0	25.0					18.0		18.0	18.0	
Total Split (s)	50.0	50.0	50.0					25.0		25.0	25.0	
Total Split (%)	66.7%	66.7%	66.7%					33.3%		33.3%	33.3%	
Yellow Time (s)	3.6	3.6	3.6					3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3	1.3					1.4		1.4	1.4	
Lost Time Adjust (s)		-0.9	-0.9					-0.6			-0.6	
Total Lost Time (s)		4.0	4.0					4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Act Effct Green (s)		60.4	60.4					9.5			9.5	
Actuated g/C Ratio		0.81	0.81					0.13			0.13	
v/c Ratio		0.19	0.06					0.57			0.50	
Control Delay		1.1	0.1					36.0			36.8	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		1.1	0.1					36.0			36.8	
LOS		A	A					D			D	
Approach Delay		1.0						36.0			36.8	
Approach LOS		A						D			D	
Queue Length 50th (ft)		11	0					54			43	
Queue Length 95th (ft)		20	1					101			m75	
Internal Link Dist (ft)		1368			1024			309			314	
Turn Bay Length (ft)			130									
Base Capacity (vph)		2849	1176					519			470	

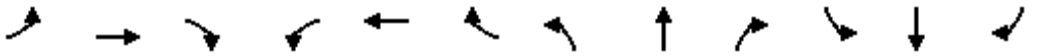
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					0			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.19	0.06					0.26			0.23	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 18 (24%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 11.0		Intersection LOS: B	
Intersection Capacity Utilization 36.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 16: Buena Vista St & Trinity St





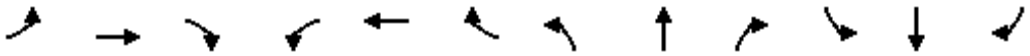
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	15	1242	14	14	4	0	0	15	9
Future Volume (vph)	0	0	0	15	1242	14	14	4	0	0	15	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	150		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	3536	1583	0	1792	0	0	1766	0
Flt Permitted					0.999			0.849				
Satd. Flow (perm)	0	0	0	0	3536	1583	0	1581	0	0	1766	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						23					10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1095			1083			394			323	
Travel Time (s)		24.9			24.6			9.0			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1366	15	0	19	0	0	26	0
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				25.0	25.0	25.0	15.0	15.0			15.0	
Total Split (s)				55.0	55.0	55.0	20.0	20.0			20.0	
Total Split (%)				73.3%	73.3%	73.3%	26.7%	26.7%			26.7%	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.0	1.0	1.0	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.6	-0.6		-0.6			-0.6	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Act Effct Green (s)					51.0	51.0		16.0			16.0	
Actuated g/C Ratio					0.68	0.68		0.21			0.21	
v/c Ratio					0.57	0.01		0.06			0.07	
Control Delay					4.2	0.5		24.7			18.2	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					4.2	0.5		24.7			18.2	
LOS					A	A		C			B	
Approach Delay					4.2			24.7			18.3	
Approach LOS					A			C			B	
Queue Length 50th (ft)					57	0		7			6	
Queue Length 95th (ft)					70	m0		26			25	
Internal Link Dist (ft)		1015			1003			314			243	
Turn Bay Length (ft)						150						
Base Capacity (vph)					2404	1083		337			384	
Starvation Cap Reductn					0	0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn					0	0		0			0	
Storage Cap Reductn					0	0		0			0	
Reduced v/c Ratio					0.57	0.01		0.06			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 35 (47%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 4.7		Intersection LOS: A	
Intersection Capacity Utilization 49.1%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

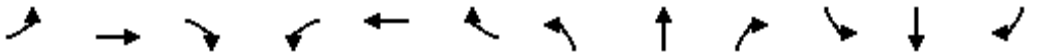
Splits and Phases: 17: Las Moras St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	541	6	0	0	0	0	7	11	13	5	0
Future Volume (vph)	5	541	6	0	0	0	0	7	11	13	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3532	0	0	0	0	0	1712	0	0	1796	0
Flt Permitted											0.964	
Satd. Flow (perm)	0	3532	0	0	0	0	0	1712	0	0	1796	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1104			1076			327			394	
Travel Time (s)		25.1			24.5			7.4			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	600	0	0	0	0	0	20	0	0	19	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.6%		ICU Level of Service A	
Analysis Period (min) 15			



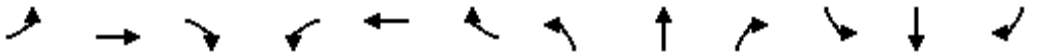
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	108	1049	61	53	325	0	0	256	162
Future Volume (vph)	0	0	0	108	1049	61	53	325	0	0	256	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	0	3522	1583	0	3514	0	0	3334	0
Flt Permitted					0.995			0.817				
Satd. Flow (perm)	0	0	0	0	3495	1503	0	2892	0	0	3334	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						66					80	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			274			390			320	
Travel Time (s)		24.6			6.2			8.9			7.3	
Confl. Peds. (#/hr)				60		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1257	66	0	411	0	0	454	0
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				25.0	25.0	25.0	18.0	18.0			18.0	
Total Split (s)				50.0	50.0	50.0	25.0	25.0			25.0	
Total Split (%)				66.7%	66.7%	66.7%	33.3%	33.3%			33.3%	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max	C-Max	Max	Max			None	
Act Effct Green (s)					46.0	46.0		21.0			21.0	
Actuated g/C Ratio					0.61	0.61		0.28			0.28	
v/c Ratio					0.59	0.07		0.51			0.46	
Control Delay					10.2	1.9		23.0			19.9	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					10.2	1.9		23.0			19.9	
LOS					B	A		C			B	
Approach Delay					9.8			23.0			19.9	
Approach LOS					A			C			B	
Queue Length 50th (ft)					165	0		66			74	
Queue Length 95th (ft)					219	13		91			116	
Internal Link Dist (ft)		1003			194			310			240	
Turn Bay Length (ft)												
Base Capacity (vph)					2143	947		809			991	
Starvation Cap Reductn					0	0		0			0	
Spillback Cap Reductn					0	0		0			0	
Storage Cap Reductn					0	0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio					0.59	0.07		0.51			0.46	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 8 (11%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 14.3		Intersection LOS: B	
Intersection Capacity Utilization 64.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 19: Colorado St & Commerce St





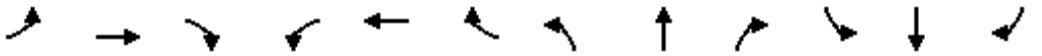
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	413	31	0	0	0	0	170	47	42	289	0
Future Volume (vph)	116	413	31	0	0	0	0	170	47	42	289	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	4981	0	0	0	0	0	3426	0	0	3518	0
Flt Permitted		0.990									0.886	
Satd. Flow (perm)	0	4903	0	0	0	0	0	3426	0	0	3136	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22						47				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1076			1834			473			390	
Travel Time (s)		24.5			41.7			10.8			8.9	
Confl. Peds. (#/hr)	60		30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	609	0	0	0	0	0	236	0	0	360	0
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	25.0	25.0						18.0		20.6	20.6	
Total Split (s)	50.0	50.0						25.0		25.0	25.0	
Total Split (%)	66.7%	66.7%						33.3%		33.3%	33.3%	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2						1.4		1.4	1.4	
Lost Time Adjust (s)		-0.8						-0.6			-0.6	
Total Lost Time (s)		4.0						4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max						Max		Max	Max	
Act Effct Green (s)		46.0						21.0			21.0	
Actuated g/C Ratio		0.61						0.28			0.28	
v/c Ratio		0.20						0.24			0.41	
Control Delay		8.9						17.3			15.0	
Queue Delay		0.0						0.0			0.0	
Total Delay		8.9						17.3			15.0	
LOS		A						B			B	
Approach Delay		8.9						17.3			15.0	
Approach LOS		A						B			B	
Queue Length 50th (ft)		89						35			41	
Queue Length 95th (ft)		112						62			58	
Internal Link Dist (ft)		996			1754			393			310	
Turn Bay Length (ft)												
Base Capacity (vph)		3015						993			878	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0						0			0	
Spillback Cap Reductn		0						0			0	
Storage Cap Reductn		0						0			0	
Reduced v/c Ratio		0.20						0.24			0.41	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 8 (11%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 12.3		Intersection LOS: B	
Intersection Capacity Utilization 40.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 20: Buena Vista St & Colorado St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	62	42	966	38	304	550	0	0	441	317
Future Volume (vph)	0	0	62	42	966	38	304	550	0	0	441	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		1	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	1611	0	3532	1583	1770	3539	0	0	3316	0
Flt Permitted					0.998		0.148					
Satd. Flow (perm)	0	0	1611	0	3532	1583	276	3539	0	0	3316	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			915			100					94	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1912			501			387			300	
Travel Time (s)		43.5			11.4			8.8			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	67	0	1096	41	330	598	0	0	824	0
Turn Type			Perm	Perm	NA	Perm	D.P+P	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases			4	2		2	8					
Detector Phase			4	2	2	2	7	4			8	
Switch Phase												
Minimum Initial (s)			10.0	10.0	10.0	10.0	3.0	10.0			10.0	
Minimum Split (s)			20.0	20.0	20.0	20.0	15.0	20.0			20.0	
Total Split (s)			63.0	37.0	37.0	37.0	26.0	63.0			37.0	
Total Split (%)			63.0%	37.0%	37.0%	37.0%	26.0%	63.0%			37.0%	
Yellow Time (s)			3.6	3.6	3.6	3.6	3.0	3.6			3.6	
All-Red Time (s)			2.5	1.7	1.7	1.7	2.0	2.5			2.5	
Lost Time Adjust (s)			0.0		-1.3	0.0	-1.0	-2.1			-2.1	
Total Lost Time (s)			6.1		4.0	5.3	4.0	4.0			4.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Recall Mode			None	C-Min	C-Min	C-Min	None	None			None	
Act Effct Green (s)			47.9		42.0	40.7	46.0	50.0			28.2	
Actuated g/C Ratio			0.48		0.42	0.41	0.46	0.50			0.28	
v/c Ratio			0.05		0.74	0.06	0.84	0.34			0.82	
Control Delay			0.1		27.4	1.4	47.9	11.5			36.8	
Queue Delay			0.0		0.9	0.0	0.0	0.0			0.0	
Total Delay			0.1		28.2	1.4	47.9	11.5			36.8	
LOS			A		C	A	D	B			D	
Approach Delay		0.1			27.3			24.4			36.8	
Approach LOS		A			C			C			D	
Queue Length 50th (ft)			0		374	1	137	126			227	
Queue Length 95th (ft)			0		#506	1	209	36			284	
Internal Link Dist (ft)		1832			421			307			220	
Turn Bay Length (ft)							100					
Base Capacity (vph)			1311		1483	703	467	2088			1157	
Starvation Cap Reductn			0		159	0	0	0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn			0		0	0	0	0			0	
Storage Cap Reductn			0		0	0	0	0			0	
Reduced v/c Ratio			0.05		0.83	0.06	0.71	0.29			0.71	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 7 (7%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 28.4		Intersection LOS: C	
Intersection Capacity Utilization 77.1%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 21: Frio St & Commerce St



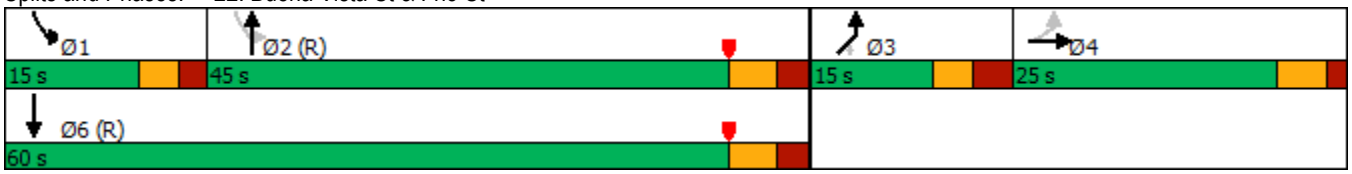


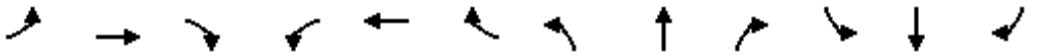
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	SBR2	NEL	NER	NER2
Lane Configurations											
Traffic Volume (vph)	57	227	123	522	43	39	363	73	144	4	4
Future Volume (vph)	57	227	123	522	43	39	363	73	144	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		0	100			0	0	
Storage Lanes	0		0		0	1			1	1	
Taper Length (ft)	25					25			25		
Satd. Flow (prot)	0	4822	0	3500	0	1770	3451	0	1770	0	1504
Flt Permitted		0.993				0.347			0.954		
Satd. Flow (perm)	0	4822	0	3500	0	646	3451	0	1770	0	1504
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)				10			91				146
Link Speed (mph)		30		30			30		30		
Link Distance (ft)		341		398			387		431		
Travel Time (s)		7.8		9.0			8.8		9.8		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)											10%
Lane Group Flow (vph)	0	443	0	614	0	42	474	0	161	0	4
Turn Type	Perm	NA		NA		D.P+P	NA		Prot		Perm
Protected Phases		4		2		1	6		3		
Permitted Phases	4					2					3
Detector Phase	4	4		2		1	6		3		3
Switch Phase											
Minimum Initial (s)	15.0	15.0		10.0		3.0	10.0		3.0		3.0
Minimum Split (s)	20.3	20.3		20.0		15.0	20.0		10.0		10.0
Total Split (s)	25.0	25.0		45.0		15.0	60.0		15.0		15.0
Total Split (%)	25.0%	25.0%		45.0%		15.0%	60.0%		15.0%		15.0%
Yellow Time (s)	3.6	3.6		3.6		3.0	3.6		3.0		3.0
All-Red Time (s)	1.7	1.7		2.5		2.0	2.5		3.0		3.0
Lost Time Adjust (s)		-1.3		-2.1		-0.4	-2.1		0.0		0.0
Total Lost Time (s)		4.0		4.0		4.6	4.0		6.0		6.0
Lead/Lag	Lag	Lag		Lag		Lead			Lead		Lead
Lead-Lag Optimize?	Yes	Yes		Yes		Yes			Yes		Yes
Recall Mode	None	None		C-Min		None	C-Min		None		None
Act Effct Green (s)		16.8		48.5		51.3	54.7		14.5		14.5
Actuated g/C Ratio		0.17		0.48		0.51	0.55		0.14		0.14
v/c Ratio		0.55		0.36		0.11	0.25		0.63		0.01
Control Delay		40.8		18.0		12.4	8.6		51.5		0.0
Queue Delay		0.0		0.0		0.0	0.0		0.0		0.0
Total Delay		40.8		18.0		12.4	8.6		51.5		0.0
LOS		D		B		B	A		D		A
Approach Delay		40.8		18.0			8.9		50.3		
Approach LOS		D		B			A		D		
Queue Length 50th (ft)		96		128		10	44		98		0
Queue Length 95th (ft)		127		197		m12	44		161		0
Internal Link Dist (ft)		261		318			307		351		
Turn Bay Length (ft)						100					
Base Capacity (vph)		1012		1717		465	1984		255		342
Starvation Cap Reductn		0		0		0	0		0		0

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	SBR2	NEL	NER	NER2
Spillback Cap Reductn		0		0		0	0		0		0
Storage Cap Reductn		0		0		0	0		0		0
Reduced v/c Ratio		0.44		0.36		0.09	0.24		0.63		0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 55 (55%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 24.2		Intersection LOS: C	
Intersection Capacity Utilization 55.4%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 22: Buena Vista St & Frio St



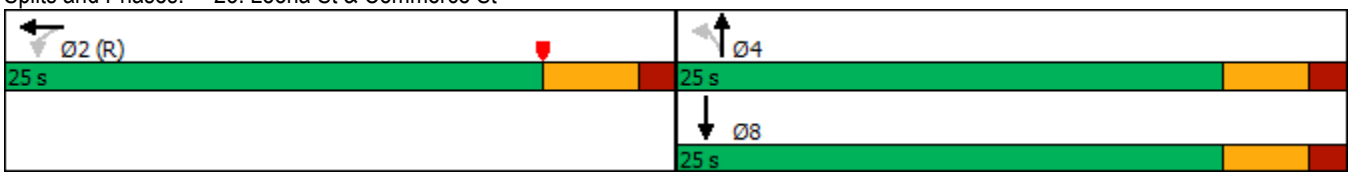


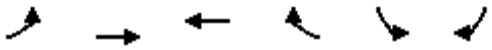
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	820	10	9	6	0	0	5	33
Future Volume (vph)	0	0	0	17	820	10	9	6	0	0	5	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	1770	5075	0	0	1809	0	0	1641	0
Flt Permitted				0.950				0.816				
Satd. Flow (perm)	0	0	0	1304	5075	0	0	1520	0	0	1641	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						36	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		501			236			382			320	
Travel Time (s)		11.4			5.4			8.7			7.3	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	18	902	0	0	17	0	0	41	0
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0		6.0	6.0			6.0	
Minimum Split (s)				20.0	20.0		12.0	12.0			12.0	
Total Split (s)				25.0	25.0		25.0	25.0			25.0	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Yellow Time (s)				3.6	3.6		3.2	3.2			3.2	
All-Red Time (s)				1.4	1.4		1.5	1.5			1.5	
Lost Time Adjust (s)				-1.0	-1.0			-0.7			-0.7	
Total Lost Time (s)				4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Min	C-Min		Min	Min			Min	
Act Effct Green (s)				35.3	35.3			6.7			6.7	
Actuated g/C Ratio				0.71	0.71			0.13			0.13	
v/c Ratio				0.02	0.25			0.08			0.16	
Control Delay				2.4	2.8			18.2			10.9	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				2.4	2.8			18.2			10.9	
LOS				A	A			B			B	
Approach Delay					2.8			18.2			10.9	
Approach LOS					A			B			B	
Queue Length 50th (ft)				1	24			5			1	
Queue Length 95th (ft)				m6	54			m14			22	
Internal Link Dist (ft)		421			156			302			240	
Turn Bay Length (ft)												
Base Capacity (vph)				920	3584			638			710	
Starvation Cap Reductn				0	0			0			0	
Spillback Cap Reductn				0	68			0			20	
Storage Cap Reductn				0	0			0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio				0.02	0.26			0.03			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 45 (90%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.25			
Intersection Signal Delay: 3.4		Intersection LOS: A	
Intersection Capacity Utilization 30.2%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

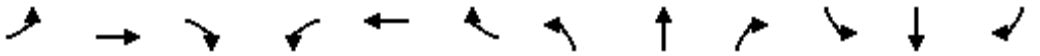
Splits and Phases: 23: Leona St & Commerce St





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	13	582	0	0	8	0
Future Volume (vph)	13	582	0	0	8	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	5080	0	0	1770	0
Flt Permitted		0.999			0.950	
Satd. Flow (perm)	0	5080	0	0	1770	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		308	180		382	
Travel Time (s)		7.0	4.1		8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	647	0	0	9	0
Sign Control		Free	Free		Stop	

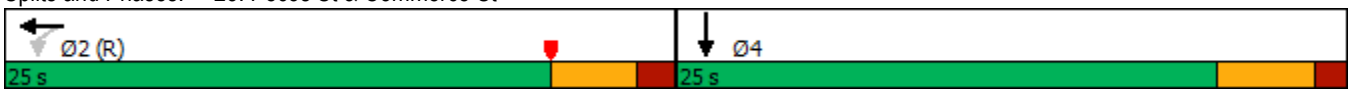
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	21.5%	ICU Level of Service	A
Analysis Period (min)	15		

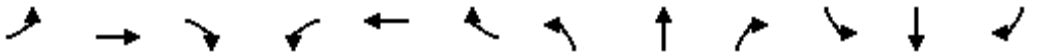


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	259	505	0	0	0	0	0	940	259
Future Volume (vph)	0	0	0	259	505	0	0	0	0	0	940	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	1770	5085	0	0	0	0	0	4923	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	5085	0	0	0	0	0	4923	0
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)											172	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		155			387			408			325	
Travel Time (s)		3.5			8.8			9.3			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	282	549	0	0	0	0	0	1304	0
Turn Type				Perm	NA						NA	
Protected Phases					2						4	
Permitted Phases				2								
Detector Phase				2	2						4	
Switch Phase												
Minimum Initial (s)				10.0	10.0						7.1	
Minimum Split (s)				20.0	20.0						12.0	
Total Split (s)				25.0	25.0						25.0	
Total Split (%)				50.0%	50.0%						50.0%	
Yellow Time (s)				3.2	3.2						3.6	
All-Red Time (s)				1.5	1.5						1.3	
Lost Time Adjust (s)				0.0	-0.7						-0.9	
Total Lost Time (s)				4.7	4.0						4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Min	C-Min						Min	
Act Effct Green (s)				23.1	23.8						18.2	
Actuated g/C Ratio				0.46	0.48						0.36	
v/c Ratio				0.35	0.23						0.69	
Control Delay				11.0	7.8						13.2	
Queue Delay				0.0	0.0						0.0	
Total Delay				11.0	7.8						13.2	
LOS				B	A						B	
Approach Delay					8.9						13.2	
Approach LOS					A						B	
Queue Length 50th (ft)				100	43						96	
Queue Length 95th (ft)				150	92						111	
Internal Link Dist (ft)		75			307			328			245	
Turn Bay Length (ft)												
Base Capacity (vph)				832	2461						2207	
Starvation Cap Reductn				0	0						0	
Spillback Cap Reductn				0	0						0	
Storage Cap Reductn				0	0						0	
Reduced v/c Ratio				0.34	0.22						0.59	

Intersection Summary		
Area Type:	Other	
Cycle Length: 50		
Actuated Cycle Length: 50		
Offset: 40 (80%), Referenced to phase 2:WBTL, Start of Yellow		
Natural Cycle: 40		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.69		
Intersection Signal Delay: 11.5		Intersection LOS: B
Intersection Capacity Utilization 45.5%		ICU Level of Service A
Analysis Period (min) 15		

Splits and Phases: 25: Pecos St & Commerce St

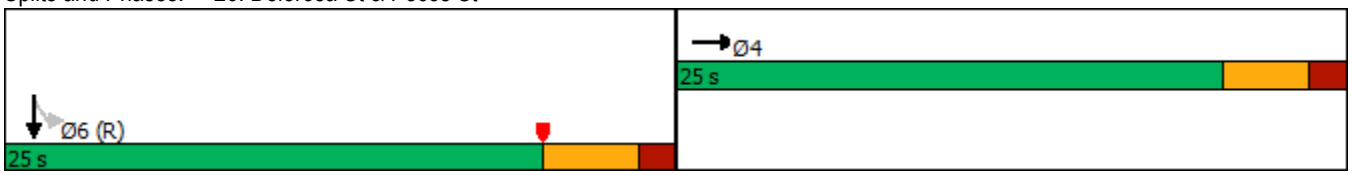




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	482	230	0	0	0	0	0	0	132	949	0
Future Volume (vph)	0	482	230	0	0	0	0	0	0	132	949	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	4841	0	0	0	0	0	0	0	0	6369	0
Flt Permitted											0.994	
Satd. Flow (perm)	0	4841	0	0	0	0	0	0	0	0	6369	0
Right Turn on Red			Yes			Yes			Yes	No		Yes
Satd. Flow (RTOR)		40										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		233			388			389			408	
Travel Time (s)		5.3			8.8			8.8			9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	774	0	0	0	0	0	0	0	0	1175	0
Turn Type		NA								Perm	NA	
Protected Phases		4									6	
Permitted Phases										6		
Detector Phase		4								6	6	
Switch Phase												
Minimum Initial (s)		6.0								12.0	12.0	
Minimum Split (s)		20.0								17.0	17.0	
Total Split (s)		25.0								25.0	25.0	
Total Split (%)		50.0%								50.0%	50.0%	
Yellow Time (s)		3.2								3.6	3.6	
All-Red Time (s)		1.5								1.4	1.4	
Lost Time Adjust (s)		-0.7									-1.0	
Total Lost Time (s)		4.0									4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		None								C-Min	C-Min	
Act Effct Green (s)		12.6									29.4	
Actuated g/C Ratio		0.25									0.59	
v/c Ratio		0.62									0.31	
Control Delay		17.7									2.9	
Queue Delay		0.0									0.0	
Total Delay		17.7									2.9	
LOS		B									A	
Approach Delay		17.7									2.9	
Approach LOS		B									A	
Queue Length 50th (ft)		66									27	
Queue Length 95th (ft)		130									45	
Internal Link Dist (ft)		153			308			309			328	
Turn Bay Length (ft)												
Base Capacity (vph)		2056									3747	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.38									0.31	

Intersection Summary		
Area Type:	Other	
Cycle Length: 50		
Actuated Cycle Length: 50		
Offset: 20 (40%), Referenced to phase 6:SBTL, Start of Yellow		
Natural Cycle: 40		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.62		
Intersection Signal Delay: 8.8		Intersection LOS: A
Intersection Capacity Utilization 36.9%		ICU Level of Service A
Analysis Period (min) 15		

Splits and Phases: 26: Dolorosa St & Pecos St

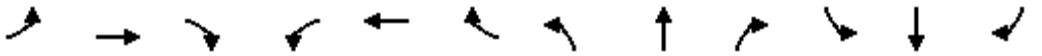


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	745	172	32	146	0	0	0	0
Future Volume (vph)	0	0	0	0	745	172	32	146	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	0	4943	0	0	3507	0	0	0	0
Flt Permitted								0.991				
Satd. Flow (perm)	0	0	0	0	4943	0	0	3507	0	0	0	0
Right Turn on Red			Yes			Yes	No		Yes			Yes
Satd. Flow (RTOR)					116							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		387			563			166			325	
Travel Time (s)		8.8			12.8			3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	997	0	0	194	0	0	0	0
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Detector Phase					2		4	4				
Switch Phase												
Minimum Initial (s)					10.0		5.0	5.0				
Minimum Split (s)					38.0		23.7	23.7				
Total Split (s)					70.0		30.0	30.0				
Total Split (%)					70.0%		30.0%	30.0%				
Yellow Time (s)					3.2		3.2	3.2				
All-Red Time (s)					1.5		1.5	1.5				
Lost Time Adjust (s)					-2.0			-1.7				
Total Lost Time (s)					2.7			3.0				
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode					C-Max		Max	Max				
Act Effct Green (s)					67.3			27.0				
Actuated g/C Ratio					0.67			0.27				
v/c Ratio					0.30			0.21				
Control Delay					6.2			28.9				
Queue Delay					0.0			0.0				
Total Delay					6.2			28.9				
LOS					A			C				
Approach Delay					6.2			28.9				
Approach LOS					A			C				
Queue Length 50th (ft)					73			50				
Queue Length 95th (ft)					84			79				
Internal Link Dist (ft)		307			483			86			245	
Turn Bay Length (ft)												
Base Capacity (vph)					3364			946				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.30			0.21				

Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 85 (85%), Referenced to phase 2:WBT, Start of Yellow		
Natural Cycle: 65		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.30		
Intersection Signal Delay: 9.9	Intersection LOS: A	
Intersection Capacity Utilization 45.5%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 27: San Saba & Commerce St





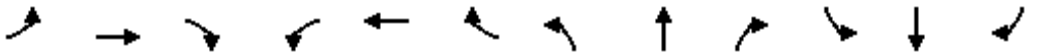
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	638	2	0	0	0	0	1	10	0	0	0
Future Volume (vph)	65	638	2	0	0	0	0	1	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	0		0
Storage Lanes	1		1	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	5085	1583	0	0	0	0	1863	1583	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1770	5085	1006	0	0	0	0	1863	1583	0	0	0
Right Turn on Red	No		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			19						13			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		388			565			393			243	
Travel Time (s)		8.8			12.8			8.9			5.5	
Confl. Peds. (#/hr)			200									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	71	693	2	0	0	0	0	1	11	0	0	0
Turn Type	Split	NA	Perm					NA	Perm			
Protected Phases	6	6						4				
Permitted Phases			6						4			
Detector Phase	6	6	6					4	4			
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					6.0	6.0			
Minimum Split (s)	25.0	25.0	25.0					30.0	30.0			
Total Split (s)	100.0	100.0	100.0					30.0	30.0			
Total Split (%)	76.9%	76.9%	76.9%					23.1%	23.1%			
Yellow Time (s)	3.6	3.6	3.6					3.2	3.2			
All-Red Time (s)	1.0	1.0	1.0					2.1	2.1			
Lost Time Adjust (s)	-0.6	-0.6	-0.6					-0.6	-0.6			
Total Lost Time (s)	4.0	4.0	4.0					4.7	4.7			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min	C-Min					None	None			
Act Effct Green (s)	123.9	123.9	123.9					6.6	6.6			
Actuated g/C Ratio	0.95	0.95	0.95					0.05	0.05			
v/c Ratio	0.04	0.14	0.00					0.01	0.12			
Control Delay	0.6	0.6	0.0					59.0	26.9			
Queue Delay	0.0	0.0	0.0					0.0	0.0			
Total Delay	0.6	0.6	0.0					59.0	26.9			
LOS	A	A	A					E	C			
Approach Delay		0.6						29.6				
Approach LOS		A						C				
Queue Length 50th (ft)	0	0	0					1	0			
Queue Length 95th (ft)	9	23	0					7	19			
Internal Link Dist (ft)		308			485			313			163	
Turn Bay Length (ft)	150		150									
Base Capacity (vph)	1686	4845	959					362	318			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0					0	0			
Spillback Cap Reductn	0	0	0					0	0			
Storage Cap Reductn	0	0	0					0	0			
Reduced v/c Ratio	0.04	0.14	0.00					0.00	0.03			

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 88 (68%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.14			
Intersection Signal Delay: 1.0		Intersection LOS: A	
Intersection Capacity Utilization 24.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 28: Dolorosa St & San Saba St



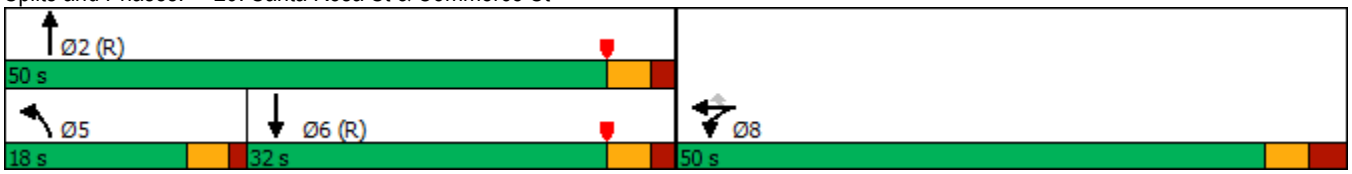


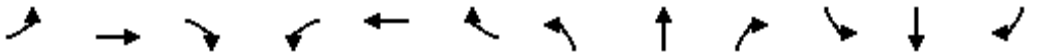
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	83	563	98	185	477	0	0	391	135
Future Volume (vph)	0	0	0	83	563	98	185	477	0	0	391	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		100	150		0	0		0
Storage Lanes	0		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	1770	3539	1583	3433	3539	0	0	4887	0
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	1770	3539	1583	3433	3539	0	0	4887	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						107					86	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			416			374			398	
Travel Time (s)		12.8			9.5			8.5			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	90	612	107	201	518	0	0	572	0
Turn Type				Split	NA	Perm	Prot	NA			NA	
Protected Phases				8	8		5	2			6	
Permitted Phases						8						
Detector Phase				8	8	8	5	2			6	
Switch Phase												
Minimum Initial (s)				5.0	5.0	5.0	3.0	10.0			10.0	
Minimum Split (s)				35.0	35.0	35.0	15.0	35.0			20.0	
Total Split (s)				50.0	50.0	50.0	18.0	50.0			32.0	
Total Split (%)				50.0%	50.0%	50.0%	18.0%	50.0%			32.0%	
Yellow Time (s)				3.2	3.2	3.2	3.0	3.2			3.2	
All-Red Time (s)				3.0	3.0	3.0	1.4	2.0			2.0	
Lost Time Adjust (s)				-2.2	-2.2	-2.2	-0.4	-1.2			-1.2	
Total Lost Time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Recall Mode				Max	Max	Max	Max	C-Max			C-Max	
Act Effct Green (s)				46.0	46.0	46.0	14.0	46.0			28.0	
Actuated g/C Ratio				0.46	0.46	0.46	0.14	0.46			0.28	
v/c Ratio				0.11	0.38	0.14	0.42	0.32			0.40	
Control Delay				19.9	23.6	10.9	54.4	15.9			25.5	
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay				19.9	23.6	10.9	54.4	15.9			25.5	
LOS				B	C	B	D	B			C	
Approach Delay					21.5			26.7			25.5	
Approach LOS					C			C			C	
Queue Length 50th (ft)				41	161	7	70	71			90	
Queue Length 95th (ft)				80	220	58	107	123			124	
Internal Link Dist (ft)		483			336			294			318	
Turn Bay Length (ft)						100	150					
Base Capacity (vph)				814	1627	785	480	1627			1430	
Starvation Cap Reductn				0	0	0	0	0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn				0	0	0	0	0			0	
Storage Cap Reductn				0	0	0	0	0			0	
Reduced v/c Ratio				0.11	0.38	0.14	0.42	0.32			0.40	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 24.4		Intersection LOS: C	
Intersection Capacity Utilization 41.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 29: Santa Rosa St & Commerce St



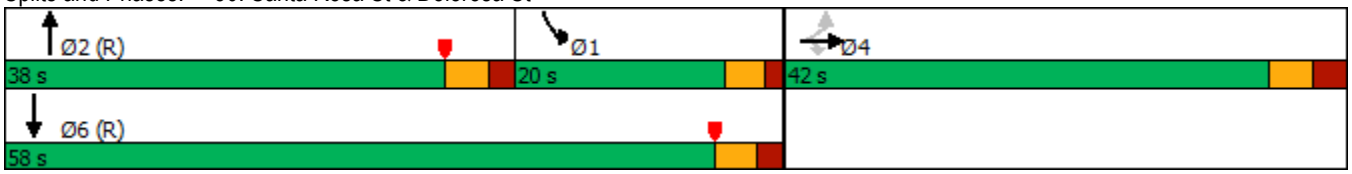


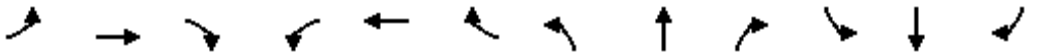
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	464	85	0	0	0	0	631	99	94	598	0
Future Volume (vph)	99	464	85	0	0	0	0	631	99	94	598	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	150		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	5085	1583	0	0	0	0	4984	0	3433	3539	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	5085	1583	0	0	0	0	4984	0	3433	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			92					32				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		565			424			416			374	
Travel Time (s)		12.8			9.6			9.5			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	504	92	0	0	0	0	794	0	102	650	0
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Detector Phase	4	4	4					2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0					10.0		3.0	10.0	
Minimum Split (s)	25.0	25.0	25.0					25.0		15.0	40.0	
Total Split (s)	42.0	42.0	42.0					38.0		20.0	58.0	
Total Split (%)	42.0%	42.0%	42.0%					38.0%		20.0%	58.0%	
Yellow Time (s)	3.2	3.2	3.2					3.2		3.0	3.2	
All-Red Time (s)	2.7	2.7	2.7					2.0		1.4	2.0	
Lost Time Adjust (s)	-1.9	-1.9	-1.9					-1.2		-0.4	-1.2	
Total Lost Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lead/Lag								Lead		Lag		
Lead-Lag Optimize?								Yes		Yes		
Recall Mode	Max	Max	Max					C-Max		Max	C-Max	
Act Effct Green (s)	38.0	38.0	38.0					34.0		16.0	54.0	
Actuated g/C Ratio	0.38	0.38	0.38					0.34		0.16	0.54	
v/c Ratio	0.16	0.26	0.14					0.46		0.19	0.34	
Control Delay	21.3	21.8	5.0					25.8		33.2	7.6	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.6	
Total Delay	21.3	21.8	5.0					25.8		33.2	8.2	
LOS	C	C	A					C		C	A	
Approach Delay		19.5						25.8			11.6	
Approach LOS		B						C			B	
Queue Length 50th (ft)	45	79	0					138		32	46	
Queue Length 95th (ft)	83	106	31					176		58	53	
Internal Link Dist (ft)		485			344			336			294	
Turn Bay Length (ft)			150							150		
Base Capacity (vph)	672	1932	658					1715		549	1911	
Starvation Cap Reductn	0	0	0					0		0	839	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0	0					0		0	0	
Storage Cap Reductn	0	0	0					0		0	0	
Reduced v/c Ratio	0.16	0.26	0.14					0.46		0.19	0.61	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 40 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay: 19.1		Intersection LOS: B	
Intersection Capacity Utilization 41.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 30: Santa Rosa St & Dolorosa St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	57	785	14	15	2	0	0	21	25
Future Volume (vph)	0	0	0	57	785	14	15	2	0	0	21	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	5070	1583	0	1783	0	0	1727	0
Flt Permitted					0.997			0.714				
Satd. Flow (perm)	0	0	0	0	4898	1583	0	1330	0	0	1727	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						19					27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		416			807			422			525	
Travel Time (s)		9.5			18.3			9.6			11.9	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	915	15	0	18	0	0	50	0
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			8			4	
Permitted Phases				2		2	8					
Detector Phase				2	2	2	8	8			4	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	5.0			5.0	
Minimum Split (s)				45.0	45.0	45.0	20.0	20.0			20.0	
Total Split (s)				68.0	68.0	68.0	32.0	32.0			32.0	
Total Split (%)				68.0%	68.0%	68.0%	32.0%	32.0%			32.0%	
Yellow Time (s)				3.2	3.2	3.2	3.2	3.2			3.2	
All-Red Time (s)				1.1	1.1	1.1	1.5	1.5			1.5	
Lost Time Adjust (s)					-0.3	0.0		0.0			-0.7	
Total Lost Time (s)					4.0	4.3		4.7			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max	C-Max	Min	Min			Min	
Act Effct Green (s)					85.5	85.2		5.8			6.5	
Actuated g/C Ratio					0.86	0.85		0.06			0.06	
v/c Ratio					0.22	0.01		0.23			0.36	
Control Delay					3.6	1.3		62.6			32.7	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					3.6	1.3		62.6			32.7	
LOS					A	A		E			C	
Approach Delay					3.5			62.6			32.7	
Approach LOS					A			E			C	
Queue Length 50th (ft)					82	1		12			14	
Queue Length 95th (ft)					87	m3		m35			50	
Internal Link Dist (ft)		336			727			342			445	
Turn Bay Length (ft)						150						
Base Capacity (vph)					4186	1351		363			503	

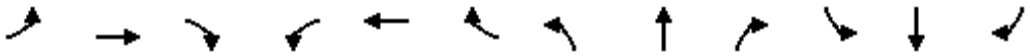
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0		0			0	
Spillback Cap Reductn					0	0		0			0	
Storage Cap Reductn					0	0		0			0	
Reduced v/c Ratio					0.22	0.01		0.05			0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 70 (70%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay: 6.1		Intersection LOS: A	
Intersection Capacity Utilization 31.2%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

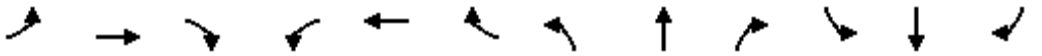
Splits and Phases: 31: Laredo St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	447	0	0	0	0	0	8	7	72	0	0
Future Volume (vph)	8	447	0	0	0	0	0	8	7	72	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	5080	0	0	0	0	0	1744	0	0	1770	0
Flt Permitted		0.999									0.950	
Satd. Flow (perm)	0	5080	0	0	0	0	0	1744	0	0	1770	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		424			814			274			422	
Travel Time (s)		9.6			18.5			6.2			9.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	495	0	0	0	0	0	17	0	0	78	0
Sign Control		Free			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.1%		ICU Level of Service A	
Analysis Period (min) 15			



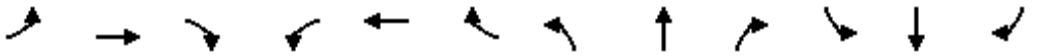
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	172	715	73	74	298	0	0	336	67
Future Volume (vph)	0	0	0	172	715	73	74	298	0	0	336	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	1610	3387	1583	0	3504	0	0	3451	0
Flt Permitted				0.950	0.999			0.671				
Satd. Flow (perm)	0	0	0	1610	3387	1583	0	2375	0	0	3451	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						111					21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		807			265			167			470	
Travel Time (s)		18.3			6.0			3.8			10.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	168	796	79	0	404	0	0	438	0
Turn Type				Perm	NA	Perm	D.P+P	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2		2	8					
Detector Phase				2	2	2	7	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	3.0	10.0			10.0	
Minimum Split (s)				20.0	20.0	20.0	10.0	25.0			15.0	
Total Split (s)				34.0	34.0	34.0	14.0	38.0			24.0	
Total Split (%)				34.0%	34.0%	34.0%	14.0%	38.0%			24.0%	
Yellow Time (s)				3.2	3.2	3.2	3.0	3.2			3.2	
All-Red Time (s)				1.5	1.5	1.5	1.0	1.4			1.4	
Lost Time Adjust (s)				-2.0	-2.0	-2.0		-2.0			-2.0	
Total Lost Time (s)				2.7	2.7	2.7		2.6			2.6	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Recall Mode				C-Max	C-Max	C-Max	Min	Min			Min	
Act Effct Green (s)				69.7	69.7	69.7		25.0			17.5	
Actuated g/C Ratio				0.70	0.70	0.70		0.25			0.18	
v/c Ratio				0.15	0.34	0.07		0.62			0.70	
Control Delay				6.1	6.8	0.7		24.5			43.0	
Queue Delay				1.0	1.8	0.0		0.0			0.0	
Total Delay				7.1	8.6	0.7		24.5			43.0	
LOS				A	A	A		C			D	
Approach Delay					7.8			24.5			43.0	
Approach LOS					A			C			D	
Queue Length 50th (ft)				35	97	0		61			132	
Queue Length 95th (ft)				70	149	8		74			176	
Internal Link Dist (ft)		727			185			87			390	
Turn Bay Length (ft)												
Base Capacity (vph)				1121	2359	1136		896			760	
Starvation Cap Reductn				739	1342	0		0			0	
Spillback Cap Reductn				0	0	0		0			0	
Storage Cap Reductn				0	0	0		0			0	
Reduced v/c Ratio				0.44	0.78	0.07		0.45			0.58	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	20.0
Total Split (s)	28.0
Total Split (%)	28%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 22 (22%), Referenced to phase 2:WBTL, Start of Yellow		
Natural Cycle: 65		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.70		
Intersection Signal Delay: 19.5	Intersection LOS: B	
Intersection Capacity Utilization 51.6%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 33: Military Plaza & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	416	51	0	0	0	0	315	64	92	412	0
Future Volume (vph)	59	416	51	0	0	0	0	315	64	92	412	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	130		0
Storage Lanes	0		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	5055	1583	0	0	0	0	3451	0	1770	3539	0
Flt Permitted		0.994								0.462		
Satd. Flow (perm)	0	5055	1583	0	0	0	0	3451	0	861	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			72					21				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		814			454			543			226	
Travel Time (s)		18.5			10.3			12.3			5.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	516	55	0	0	0	0	412	0	100	448	0
Turn Type	Perm	NA	Perm					NA		D.P+P	NA	
Protected Phases		2 10						4		3	8	
Permitted Phases	2 10		2 10							4		
Detector Phase	2 10	2 10	2 10					4		3	8	
Switch Phase												
Minimum Initial (s)								10.0		3.0	10.0	
Minimum Split (s)								15.0		10.0	25.0	
Total Split (s)								24.0		14.0	38.0	
Total Split (%)								24.0%		14.0%	38.0%	
Yellow Time (s)								3.2		3.0	3.2	
All-Red Time (s)								1.6		1.2	1.6	
Lost Time Adjust (s)								-0.8		-0.2	-0.8	
Total Lost Time (s)								4.0		4.0	4.0	
Lead/Lag								Lead		Lag		
Lead-Lag Optimize?								Yes		Yes		
Recall Mode								Max		Max	Max	
Act Effct Green (s)		36.1	35.1					41.9		51.9	55.9	
Actuated g/C Ratio		0.36	0.35					0.42		0.52	0.56	
v/c Ratio		0.28	0.09					0.28		0.19	0.23	
Control Delay		13.6	1.1					18.8		4.6	4.1	
Queue Delay		0.0	0.0					0.0		0.0	0.0	
Total Delay		13.6	1.1					18.8		4.6	4.1	
LOS		B	A					B		A	A	
Approach Delay		12.4						18.8			4.2	
Approach LOS		B						B			A	
Queue Length 50th (ft)		48	0					83		10	24	
Queue Length 95th (ft)		61	1					122		m18	32	
Internal Link Dist (ft)		734			374			463			146	
Turn Bay Length (ft)			150							130		
Base Capacity (vph)		2931	933					1458		537	1978	
Starvation Cap Reductn		0	0					0		0	0	

Lane Group	Ø2	Ø10
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	10
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	10.0	3.0
Minimum Split (s)	20.0	25.0
Total Split (s)	32.0	30.0
Total Split (%)	32%	30%
Yellow Time (s)	3.2	3.0
All-Red Time (s)	1.8	1.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Recall Mode	C-Max	None
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	0					0		0	0	
Storage Cap Reductn		0	0					0		0	0	
Reduced v/c Ratio		0.18	0.06					0.28		0.19	0.23	

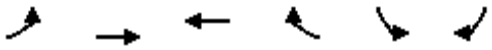
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 18 (18%), Referenced to phase 2:EBTL, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay: 11.2		Intersection LOS: B	
Intersection Capacity Utilization 35.1%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 34: Flores St & Dolorosa St

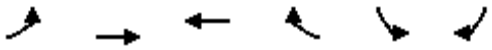


Lane Group	Ø2	Ø10
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑	↱		↱
Traffic Volume (vph)	0	0	618	4	0	301
Future Volume (vph)	0	0	618	4	0	301
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			150	0	0
Storage Lanes	0			1	0	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	0	5085	1583	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	1611
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				4		239
Link Speed (mph)		30	30		30	
Link Distance (ft)		265	234		513	
Travel Time (s)		6.0	5.3		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	672	4	0	327
Turn Type			NA	Perm		Prot
Protected Phases			2			3
Permitted Phases				2		
Detector Phase			2	2		3
Switch Phase						
Minimum Initial (s)			10.0	10.0		3.0
Minimum Split (s)			30.0	30.0		25.0
Total Split (s)			48.0	48.0		30.0
Total Split (%)			61.5%	61.5%		38.5%
Yellow Time (s)			3.2	3.2		3.0
All-Red Time (s)			1.5	1.5		1.0
Lost Time Adjust (s)			-1.7	-1.7		-2.0
Total Lost Time (s)			3.0	3.0		2.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max	C-Max		Max
Act Effct Green (s)			45.0	45.0		28.0
Actuated g/C Ratio			0.58	0.58		0.36
v/c Ratio			0.23	0.00		0.45
Control Delay			1.8	0.2		7.7
Queue Delay			0.1	0.0		0.0
Total Delay			1.9	0.2		7.7
LOS			A	A		A
Approach Delay			1.9		7.7	
Approach LOS			A		A	
Queue Length 50th (ft)			7	0		28
Queue Length 95th (ft)			9	m0		89
Internal Link Dist (ft)		185	154		433	
Turn Bay Length (ft)				150		
Base Capacity (vph)			2933	914		731
Starvation Cap Reductn			1125	0		0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			0.37	0.00		0.45

Intersection Summary			
Area Type:	Other		
Cycle Length: 78			
Actuated Cycle Length: 78			
Offset: 25 (32%), Referenced to phase 2:WBT and 6:, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay: 3.8		Intersection LOS: A	
Intersection Capacity Utilization 37.2%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 35: Commerce St & N Main Ave



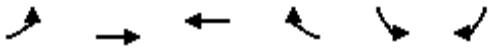


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	664	0	0	0	0	4
Future Volume (vph)	664	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	5085	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	5085	0	0	0	0	1611
Right Turn on Red		Yes				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	454			501	380	
Travel Time (s)	10.3			11.4	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	722	0	0	0	0	4
Turn Type	NA					Prot
Protected Phases	2					3
Permitted Phases						
Detector Phase	2					3
Switch Phase						
Minimum Initial (s)	10.0					3.0
Minimum Split (s)	20.6					9.0
Total Split (s)	76.0					24.0
Total Split (%)	76.0%					24.0%
Yellow Time (s)	3.2					3.0
All-Red Time (s)	1.4					1.0
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	4.6					4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max					Max
Act Effct Green (s)	71.4					20.0
Actuated g/C Ratio	0.71					0.20
v/c Ratio	0.20					0.01
Control Delay	4.2					32.2
Queue Delay	0.0					0.0
Total Delay	4.2					32.2
LOS	A					C
Approach Delay	4.2				32.3	
Approach LOS	A				C	
Queue Length 50th (ft)	42					2
Queue Length 95th (ft)	53					11
Internal Link Dist (ft)	374			421	300	
Turn Bay Length (ft)						
Base Capacity (vph)	3630					322
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.20					0.01

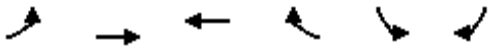
Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 35 (35%), Referenced to phase 2:EBT and 6:, Start of Yellow		
Natural Cycle: 40		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.20		
Intersection Signal Delay: 4.3	Intersection LOS: A	
Intersection Capacity Utilization 23.3%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 36: Main Plaza & Market St





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑	↱		↱
Traffic Volume (vph)	0	0	603	185	0	4
Future Volume (vph)	0	0	603	185	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			150	0	0
Storage Lanes	0			1	0	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	0	0	5085	1583	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	1611
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				201		234
Link Speed (mph)		30	30		30	
Link Distance (ft)		234	520		565	
Travel Time (s)		5.3	11.8		12.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	655	201	0	4
Turn Type			NA	Perm		Prot
Protected Phases			2			3
Permitted Phases				2		
Detector Phase			2	2		3
Switch Phase						
Minimum Initial (s)			10.0	10.0		3.0
Minimum Split (s)			30.0	30.0		25.0
Total Split (s)			48.0	48.0		30.0
Total Split (%)			61.5%	61.5%		38.5%
Yellow Time (s)			3.2	3.2		3.0
All-Red Time (s)			1.5	1.5		1.0
Lost Time Adjust (s)			0.0	0.0		0.0
Total Lost Time (s)			4.7	4.7		4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max	C-Max		Max
Act Effct Green (s)			43.3	43.3		26.0
Actuated g/C Ratio			0.56	0.56		0.33
v/c Ratio			0.23	0.21		0.01
Control Delay			9.1	1.9		0.0
Queue Delay			0.0	0.0		0.0
Total Delay			9.1	1.9		0.0
LOS			A	A		A
Approach Delay			7.4			
Approach LOS			A			
Queue Length 50th (ft)			54	0		0
Queue Length 95th (ft)			74	26		0
Internal Link Dist (ft)		154	440		485	
Turn Bay Length (ft)				150		
Base Capacity (vph)			2822	968		693
Starvation Cap Reductn			0	0		0

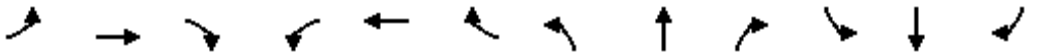


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			0.23	0.21		0.01

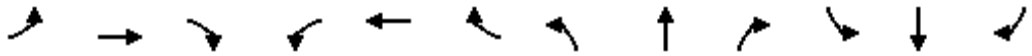
Intersection Summary			
Area Type:	Other		
Cycle Length: 78			
Actuated Cycle Length: 78			
Offset: 25 (32%), Referenced to phase 2:WBT and 6:, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.23			
Intersection Signal Delay: 7.4		Intersection LOS: A	
Intersection Capacity Utilization 22.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Commerce St & Soledad St





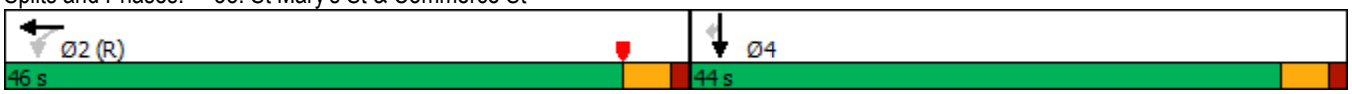
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	140	740	0	0	0	0	0	541	135
Future Volume (vph)	0	0	0	140	740	0	0	0	0	0	541	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		150
Storage Lanes	0		0	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	5045	0	0	0	0	0	3539	1583
Flt Permitted					0.992							
Satd. Flow (perm)	0	0	0	0	5045	0	0	0	0	0	3539	1583
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)												112
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		520			534			212			291	
Travel Time (s)		11.8			12.1			4.8			6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	956	0	0	0	0	0	588	147
Turn Type				Perm	NA						NA	Perm
Protected Phases					2						4	
Permitted Phases				2								4
Detector Phase				2	2						4	4
Switch Phase												
Minimum Initial (s)				10.0	10.0						5.0	5.0
Minimum Split (s)				35.0	35.0						30.0	30.0
Total Split (s)				46.0	46.0						44.0	44.0
Total Split (%)				51.1%	51.1%						48.9%	48.9%
Yellow Time (s)				3.2	3.2						3.2	3.2
All-Red Time (s)				1.4	1.4						1.4	1.4
Lost Time Adjust (s)					-0.6						-0.6	0.0
Total Lost Time (s)					4.0						4.0	4.6
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max						Max	Max
Act Effct Green (s)					42.0						40.0	39.4
Actuated g/C Ratio					0.47						0.44	0.44
v/c Ratio					0.41						0.37	0.19
Control Delay					16.4						17.5	5.6
Queue Delay					0.0						0.0	0.0
Total Delay					16.4						17.5	5.6
LOS					B						B	A
Approach Delay					16.4						15.2	
Approach LOS					B						B	
Queue Length 50th (ft)					126						113	11
Queue Length 95th (ft)					159						154	45
Internal Link Dist (ft)		440			454			132			211	
Turn Bay Length (ft)												150
Base Capacity (vph)					2354						1572	755
Starvation Cap Reductn					0						0	0

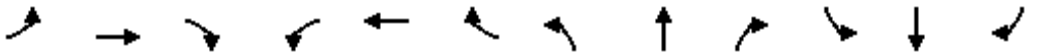


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn					0						0	0
Storage Cap Reductn					0						0	0
Reduced v/c Ratio					0.41						0.37	0.19

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 12 (13%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 15.9		Intersection LOS: B	
Intersection Capacity Utilization 38.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 38: St Mary's St & Commerce St



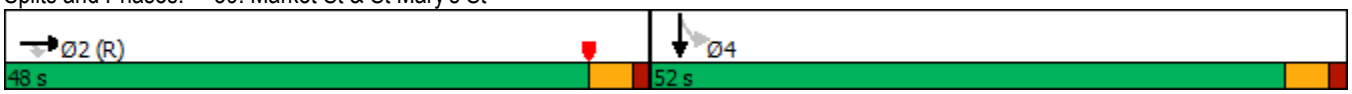


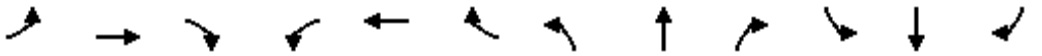
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	669	90	0	0	0	0	0	0	263	392	0
Future Volume (vph)	0	669	90	0	0	0	0	0	0	263	392	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		150
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	5085	1583	0	0	0	0	0	0	0	3468	0
Flt Permitted											0.980	
Satd. Flow (perm)	0	5085	1583	0	0	0	0	0	0	0	3468	0
Right Turn on Red			Yes			Yes			Yes	No		Yes
Satd. Flow (RTOR)			98									
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		501			530			201			212	
Travel Time (s)		11.4			12.0			4.6			4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	727	98	0	0	0	0	0	0	0	712	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									4	
Permitted Phases			2							4		
Detector Phase		2	2							4	4	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		30.0	30.0							35.0	35.0	
Total Split (s)		48.0	48.0							52.0	52.0	
Total Split (%)		48.0%	48.0%							52.0%	52.0%	
Yellow Time (s)		3.2	3.2							3.2	3.2	
All-Red Time (s)		1.3	1.3							1.5	1.5	
Lost Time Adjust (s)		-0.5	0.0								-0.7	
Total Lost Time (s)		4.0	4.5								4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max	C-Max							Max	Max	
Act Effct Green (s)		44.0	43.5								48.0	
Actuated g/C Ratio		0.44	0.44								0.48	
v/c Ratio		0.32	0.13								0.43	
Control Delay		9.8	3.0								18.0	
Queue Delay		0.0	0.0								48.0	
Total Delay		9.8	3.0								66.1	
LOS		A	A								E	
Approach Delay		9.0									66.1	
Approach LOS		A									E	
Queue Length 50th (ft)		69	0								151	
Queue Length 95th (ft)		87	0								197	
Internal Link Dist (ft)		421			450			121			132	
Turn Bay Length (ft)			150									
Base Capacity (vph)		2237	743								1664	
Starvation Cap Reductn		0	0								1010	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	0								0	
Storage Cap Reductn		0	0								0	
Reduced v/c Ratio		0.32	0.13								1.09	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 37 (37%), Referenced to phase 2:EBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 35.4		Intersection LOS: D	
Intersection Capacity Utilization 38.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 39: Market St & St Mary's St



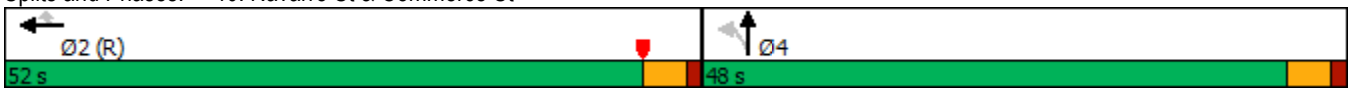


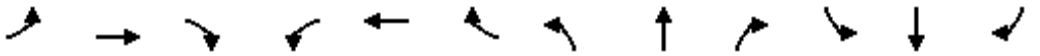
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	646	97	181	384	0	0	0	0
Future Volume (vph)	0	0	0	0	646	97	181	384	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	5085	1583	0	3483	0	0	0	0
Flt Permitted								0.984				
Satd. Flow (perm)	0	0	0	0	5085	1583	0	3483	0	0	0	0
Right Turn on Red			Yes			Yes	No		Yes			Yes
Satd. Flow (RTOR)						105						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		534			258			251			297	
Travel Time (s)		12.1			5.9			5.7			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	702	105	0	614	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					2			4				
Permitted Phases						2	4					
Detector Phase					2	2	4	4				
Switch Phase												
Minimum Initial (s)					10.0	10.0	5.0	5.0				
Minimum Split (s)					25.0	25.0	40.0	40.0				
Total Split (s)					52.0	52.0	48.0	48.0				
Total Split (%)					52.0%	52.0%	48.0%	48.0%				
Yellow Time (s)					3.2	3.2	3.2	3.2				
All-Red Time (s)					1.3	1.3	1.4	1.4				
Lost Time Adjust (s)					-1.7	-1.7		-2.0				
Total Lost Time (s)					2.8	2.8		2.6				
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode					C-Max	C-Max	Max	Max				
Act Effct Green (s)					49.2	49.2		45.4				
Actuated g/C Ratio					0.49	0.49		0.45				
v/c Ratio					0.28	0.13		0.39				
Control Delay					6.3	2.1		13.9				
Queue Delay					0.2	0.0		1.0				
Total Delay					6.5	2.1		14.9				
LOS					A	A		B				
Approach Delay					5.9			14.9				
Approach LOS					A			B				
Queue Length 50th (ft)					97	7		148				
Queue Length 95th (ft)					98	12		204				
Internal Link Dist (ft)		454			178			171			217	
Turn Bay Length (ft)						150						
Base Capacity (vph)					2501	832		1581				
Starvation Cap Reductn					932	0		665				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn					0	0		0				
Storage Cap Reductn					0	0		0				
Reduced v/c Ratio					0.45	0.13		0.67				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 85 (85%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay: 9.8		Intersection LOS: A	
Intersection Capacity Utilization 35.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Navarro St & Commerce St





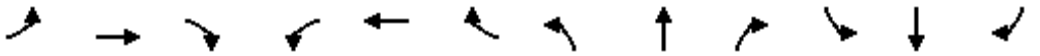
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	241	807	0	0	0	0	0	360	156	0	0	0
Future Volume (vph)	241	807	0	0	0	0	0	360	156	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	5029	0	0	0	0	0	3539	1583	0	0	0
Flt Permitted		0.989										
Satd. Flow (perm)	0	5029	0	0	0	0	0	3539	1583	0	0	0
Right Turn on Red	No		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									145			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		530			100			275			251	
Travel Time (s)		12.0			2.3			6.3			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1139	0	0	0	0	0	391	170	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		2						4				
Permitted Phases	2								4			
Detector Phase	2	2						4	4			
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0	10.0			
Minimum Split (s)	40.0	40.0						25.0	25.0			
Total Split (s)	60.0	60.0						40.0	40.0			
Total Split (%)	60.0%	60.0%						40.0%	40.0%			
Yellow Time (s)	3.2	3.2						3.2	3.2			
All-Red Time (s)	1.3	1.3						1.5	1.5			
Lost Time Adjust (s)		-1.7						-2.0	-2.0			
Total Lost Time (s)		2.8						2.7	2.7			
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max						Max	Max			
Act Effct Green (s)		57.2						37.3	37.3			
Actuated g/C Ratio		0.57						0.37	0.37			
v/c Ratio		0.40						0.30	0.25			
Control Delay		8.9						22.9	6.2			
Queue Delay		0.0						0.0	0.0			
Total Delay		8.9						22.9	6.2			
LOS		A						C	A			
Approach Delay		8.9						17.9				
Approach LOS		A						B				
Queue Length 50th (ft)		110						91	10			
Queue Length 95th (ft)		132						128	53			
Internal Link Dist (ft)		450			20			195			171	
Turn Bay Length (ft)									150			
Base Capacity (vph)		2876						1320	681			
Starvation Cap Reductn		0						0	0			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						116	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.40						0.32	0.25			

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 75 (75%), Referenced to phase 2:EBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 11.8		Intersection LOS: B	
Intersection Capacity Utilization 37.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Market St & Navarro St





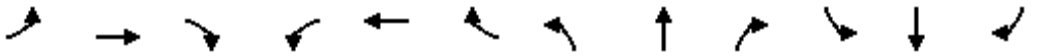
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	62	726	59	0	0	0	0	94	38
Future Volume (vph)	0	0	0	62	726	59	0	0	0	0	94	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	0	0	0	5065	1583	0	0	0	0	1790	0
Flt Permitted					0.996							
Satd. Flow (perm)	0	0	0	0	5065	1273	0	0	0	0	1790	0
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)						64					23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		258			287			262			386	
Travel Time (s)		5.9			6.5			6.0			8.8	
Confl. Peds. (#/hr)						200						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	856	64	0	0	0	0	143	0
Turn Type				Perm	NA	Perm					NA	
Protected Phases					2						4	
Permitted Phases				2		2						
Detector Phase				2	2	2					4	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0					5.0	
Minimum Split (s)				35.0	35.0	35.0					30.0	
Total Split (s)				60.0	60.0	60.0					40.0	
Total Split (%)				60.0%	60.0%	60.0%					40.0%	
Yellow Time (s)				3.2	3.2	3.2					3.2	
All-Red Time (s)				1.1	1.1	1.1					1.4	
Lost Time Adjust (s)					-0.3	0.0					-0.6	
Total Lost Time (s)					4.0	4.3					4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max	C-Max					Max	
Act Effct Green (s)					56.0	55.7					36.0	
Actuated g/C Ratio					0.56	0.56					0.36	
v/c Ratio					0.30	0.09					0.22	
Control Delay					5.7	1.3					19.6	
Queue Delay					0.2	0.0					0.0	
Total Delay					5.9	1.3					19.6	
LOS					A	A					B	
Approach Delay					5.5						19.6	
Approach LOS					A						B	
Queue Length 50th (ft)					74	0					52	
Queue Length 95th (ft)					60	0					97	
Internal Link Dist (ft)		178			207			182			306	
Turn Bay Length (ft)						150						
Base Capacity (vph)					2836	737					659	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					1056	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.48	0.09					0.22	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 80 (80%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay: 7.4		Intersection LOS: A	
Intersection Capacity Utilization 30.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 42: Commerce St & Presa St





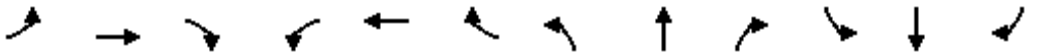
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	940	23	0	0	0	0	0	44	136	78	0
Future Volume (vph)	0	940	23	0	0	0	0	0	44	136	78	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	5085	1583	0	0	0	0	0	1611	1681	1745	0
Flt Permitted										0.950	0.986	
Satd. Flow (perm)	0	5085	1583	0	0	0	0	0	1611	1681	1745	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			25						97	97	22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		159			275			339			262	
Travel Time (s)		3.6			6.3			7.7			6.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)										23%		
Lane Group Flow (vph)	0	1022	25	0	0	0	0	0	48	114	119	0
Turn Type		NA	Perm						Perm	Split	NA	
Protected Phases		2								4	4	
Permitted Phases			2						4			
Detector Phase		2	2						4	4	4	
Switch Phase												
Minimum Initial (s)		10.0	10.0						5.0	5.0	5.0	
Minimum Split (s)		35.0	35.0						30.0	30.0	30.0	
Total Split (s)		60.0	60.0						40.0	40.0	40.0	
Total Split (%)		60.0%	60.0%						40.0%	40.0%	40.0%	
Yellow Time (s)		3.2	3.2						3.2	3.2	3.2	
All-Red Time (s)		1.5	1.5						1.5	1.5	1.5	
Lost Time Adjust (s)		-0.7	0.0						-0.7	-0.7	-0.7	
Total Lost Time (s)		4.0	4.7						4.0	4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		C-Max	C-Max						Max	Max	Max	
Act Effct Green (s)		56.0	55.3						36.0	36.0	36.0	
Actuated g/C Ratio		0.56	0.55						0.36	0.36	0.36	
v/c Ratio		0.36	0.03						0.07	0.17	0.19	
Control Delay		3.2	0.2						0.6	6.5	17.5	
Queue Delay		0.2	0.0						0.0	0.0	0.0	
Total Delay		3.3	0.2						0.6	6.5	17.5	
LOS		A	A						A	A	B	
Approach Delay		3.3						0.6			12.1	
Approach LOS		A						A			B	
Queue Length 50th (ft)		21	0						0	8	34	
Queue Length 95th (ft)		35	m0						3	28	66	
Internal Link Dist (ft)		79			195			259			182	
Turn Bay Length (ft)			150									
Base Capacity (vph)		2847	886						642	667	642	
Starvation Cap Reductn		828	0						0	0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0	0						0	0	0	
Storage Cap Reductn		0	0						0	0	0	
Reduced v/c Ratio		0.51	0.03						0.07	0.17	0.19	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 80 (80%), Referenced to phase 2:EBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay: 4.7		Intersection LOS: A	
Intersection Capacity Utilization 30.6%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 43: Presa St & Market St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	190	960	0	0	0	0	0	302	94
Future Volume (vph)	0	0	0	190	960	0	0	0	0	0	302	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	1770	5085	0	0	0	0	0	3412	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	5085	0	0	0	0	0	3412	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				207							43	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		287			180			334			345	
Travel Time (s)		6.5			4.1			7.6			7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	207	1043	0	0	0	0	0	430	0
Turn Type				Perm	NA						NA	
Protected Phases					6						8	
Permitted Phases				6								
Detector Phase				6	6						8	
Switch Phase												
Minimum Initial (s)				10.0	10.0						5.0	
Minimum Split (s)				35.0	35.0						20.0	
Total Split (s)				66.0	66.0						34.0	
Total Split (%)				66.0%	66.0%						34.0%	
Yellow Time (s)				3.2	3.2						3.2	
All-Red Time (s)				1.1	1.1						1.6	
Lost Time Adjust (s)				-1.3	-1.3						-2.0	
Total Lost Time (s)				3.0	3.0						2.8	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode				C-Max	C-Max						Min	
Act Effct Green (s)				63.0	63.0						31.2	
Actuated g/C Ratio				0.63	0.63						0.31	
v/c Ratio				0.17	0.33						0.39	
Control Delay				0.5	4.6						25.4	
Queue Delay				0.5	0.2						0.0	
Total Delay				1.0	4.8						25.4	
LOS				A	A						C	
Approach Delay					4.2						25.4	
Approach LOS					A						C	
Queue Length 50th (ft)				1	39						100	
Queue Length 95th (ft)				1	49						144	
Internal Link Dist (ft)		207			100			254			265	
Turn Bay Length (ft)												
Base Capacity (vph)				1191	3203						1094	
Starvation Cap Reductn				641	1139						0	
Spillback Cap Reductn				0	0						15	
Storage Cap Reductn				0	0						0	
Reduced v/c Ratio				0.38	0.51						0.40	

Lane Group	Ø2	Ø3	Ø4
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	2	3	4
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	10.0	3.0	5.0
Minimum Split (s)	30.0	15.0	25.0
Total Split (s)	50.0	16.0	34.0
Total Split (%)	50%	16%	34%
Yellow Time (s)	3.2	3.0	3.2
All-Red Time (s)	1.3	1.2	2.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	Max
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 70 (70%), Referenced to phase 2:WBT and 6:, Start of Yellow		
Natural Cycle: 70		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.52		
Intersection Signal Delay: 9.6	Intersection LOS: A	
Intersection Capacity Utilization 36.6%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 44: Commerce St & Losoya St



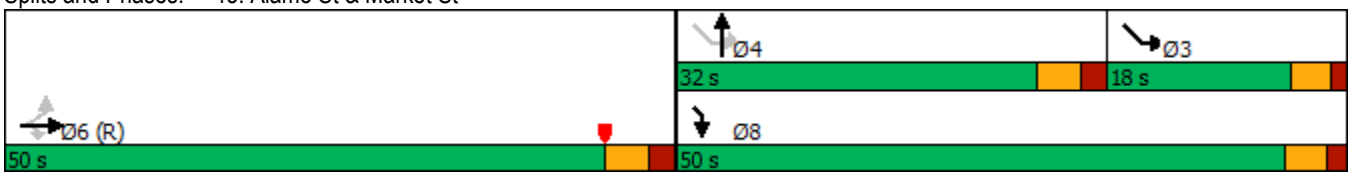


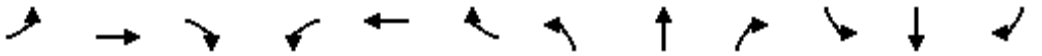
Lane Group	EBL	EBT	EBR	NBT	NBR	SEL	SER
Lane Configurations							
Traffic Volume (vph)	128	830	93	248	234	377	395
Future Volume (vph)	128	830	93	248	234	377	395
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		0	150	0
Storage Lanes	0		1		1	2	1
Taper Length (ft)	25					25	
Satd. Flow (prot)	0	5050	1583	3539	1583	3337	1441
Flt Permitted		0.993				0.965	
Satd. Flow (perm)	0	5050	1583	3539	1583	3337	1441
Right Turn on Red			Yes		Yes		
Satd. Flow (RTOR)			101		140		
Link Speed (mph)		30		30		30	
Link Distance (ft)		223		809		334	
Travel Time (s)		5.1		18.4		7.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)							38%
Lane Group Flow (vph)	0	1041	101	270	254	573	266
Turn Type	Perm	NA	Perm	NA	Perm	D.P+P	Prot
Protected Phases		6		4		3	8
Permitted Phases	6		6		4	4	
Detector Phase	6	6	6	4	4	3	8
Switch Phase							
Minimum Initial (s)	10.0	10.0	10.0	5.0	5.0	3.0	5.0
Minimum Split (s)	30.0	30.0	30.0	25.0	25.0	15.0	40.0
Total Split (s)	50.0	50.0	50.0	32.0	32.0	18.0	50.0
Total Split (%)	50.0%	50.0%	50.0%	32.0%	32.0%	18.0%	50.0%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.0	3.2
All-Red Time (s)	2.1	2.1	2.1	2.0	2.0	1.3	1.6
Lost Time Adjust (s)		-1.3	-1.3	-1.2	-1.2	-0.3	-0.8
Total Lost Time (s)		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag				Lead	Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	C-Min	C-Min	C-Min	Min	Min	Min	Min
Act Effct Green (s)		68.2	68.2	14.0	14.0	23.8	23.8
Actuated g/C Ratio		0.68	0.68	0.14	0.14	0.24	0.24
v/c Ratio		0.30	0.09	0.54	0.74	0.72	0.78
Control Delay		5.1	0.9	43.3	31.3	41.5	51.3
Queue Delay		0.0	0.0	0.0	0.0	0.1	0.0
Total Delay		5.1	0.9	43.3	31.3	41.7	51.3
LOS		A	A	D	C	D	D
Approach Delay		4.7		37.5		44.7	
Approach LOS		A		D		D	
Queue Length 50th (ft)		68	1	86	70	166	165
Queue Length 95th (ft)		77	6	115	142	142	163
Internal Link Dist (ft)		143		729		254	
Turn Bay Length (ft)						150	
Base Capacity (vph)		3446	1112	990	544	1069	662
Starvation Cap Reductn		0	0	0	0	67	11

Lane Group	EBL	EBT	EBR	NBT	NBR	SEL	SER
Spillback Cap Reductn		0	0	29	0	0	0
Storage Cap Reductn		0	0	0	0	0	0
Reduced v/c Ratio		0.30	0.09	0.28	0.47	0.57	0.41

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 85 (85%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 25.0		Intersection LOS: C	
Intersection Capacity Utilization 50.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 45: Alamo St & Market St





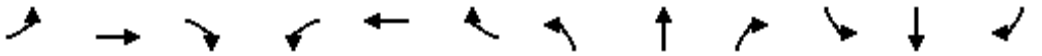
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1000	138	146	267	0	0	0	4
Future Volume (vph)	0	0	0	0	1000	138	146	267	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	0	6293	0	1681	1764	0	0	0	1611
Flt Permitted							0.950	0.997				
Satd. Flow (perm)	0	0	0	0	6293	0	1681	1764	0	0	0	1611
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					47		143	62				249
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		180			560			263			375	
Travel Time (s)		4.1			12.7			6.0			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)							10%					
Lane Group Flow (vph)	0	0	0	0	1237	0	143	306	0	0	0	4
Turn Type					NA		Split	NA				Prot
Protected Phases					2		4	4				3
Permitted Phases												
Detector Phase					2		4	4				3
Switch Phase												
Minimum Initial (s)					10.0		5.0	5.0				3.0
Minimum Split (s)					30.0		25.0	25.0				15.0
Total Split (s)					50.0		34.0	34.0				16.0
Total Split (%)					50.0%		34.0%	34.0%				16.0%
Yellow Time (s)					3.2		3.2	3.2				3.0
All-Red Time (s)					1.3		2.0	2.0				1.2
Lost Time Adjust (s)					-1.7		-2.3	-2.3				-1.1
Total Lost Time (s)					2.8		2.9	2.9				3.1
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode					C-Max		Max	Max				None
Act Effct Green (s)					61.7		31.1	31.1				4.6
Actuated g/C Ratio					0.62		0.31	0.31				0.05
v/c Ratio					0.32		0.23	0.52				0.01
Control Delay					3.3		3.5	14.8				0.0
Queue Delay					0.0		0.6	5.3				0.0
Total Delay					3.3		4.1	20.1				0.0
LOS					A		A	C				A
Approach Delay					3.3			15.0				
Approach LOS					A			B				
Queue Length 50th (ft)					26		3	171				0
Queue Length 95th (ft)					47		12	256				0
Internal Link Dist (ft)		100			480			183			295	
Turn Bay Length (ft)												
Base Capacity (vph)					3898		621	591				424
Starvation Cap Reductn					0		239	219				0
Spillback Cap Reductn					0		0	0				0
Storage Cap Reductn					0		0	0				0
Reduced v/c Ratio					0.32		0.37	0.82				0.01

Lane Group	Ø6	Ø8
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	6	8
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	10.0	5.0
Minimum Split (s)	35.0	20.0
Total Split (s)	66.0	34.0
Total Split (%)	66%	34%
Yellow Time (s)	3.2	3.2
All-Red Time (s)	1.1	1.6
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Recall Mode	C-Max	Min
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 70 (70%), Referenced to phase 2:WBT and 6:, Start of Yellow		
Natural Cycle: 70		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.52		
Intersection Signal Delay: 6.4	Intersection LOS: A	
Intersection Capacity Utilization 44.2%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 46: Commerce St



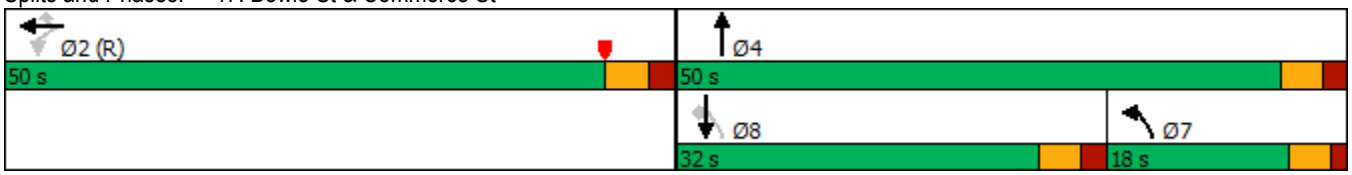


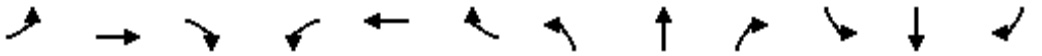
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	139	707	91	88	80	0	0	513	119
Future Volume (vph)	0	0	0	139	707	91	88	80	0	0	513	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	1770	5085	1583	0	3447	0	0	3539	1583
Flt Permitted				0.950				0.616				
Satd. Flow (perm)	0	0	0	1390	5085	1583	0	2180	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						99						129
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		305			635			287			349	
Travel Time (s)		6.9			14.4			6.5			7.9	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	151	768	99	0	183	0	0	558	129
Turn Type				Perm	NA	Perm	D.P+P	NA			NA	Perm
Protected Phases					2		7	4			8	
Permitted Phases				2		2	8					8
Detector Phase				2	2	2	7	4			8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	3.0	5.0			5.0	5.0
Minimum Split (s)				30.0	30.0	30.0	15.0	40.0			25.0	25.0
Total Split (s)				50.0	50.0	50.0	18.0	50.0			32.0	32.0
Total Split (%)				50.0%	50.0%	50.0%	18.0%	50.0%			32.0%	32.0%
Yellow Time (s)				3.2	3.2	3.2	3.0	3.2			3.2	3.2
All-Red Time (s)				2.1	2.1	2.1	1.4	1.9			1.9	1.9
Lost Time Adjust (s)				-1.3	-1.3	-1.3		-1.1			-1.1	-1.1
Total Lost Time (s)				4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	Max
Act Effct Green (s)				46.0	46.0	46.0		46.0			28.0	28.0
Actuated g/C Ratio				0.46	0.46	0.46		0.46			0.28	0.28
v/c Ratio				0.24	0.33	0.13		0.16			0.56	0.24
Control Delay				17.6	17.7	3.7		19.8			33.4	6.3
Queue Delay				0.0	0.0	0.0		0.0			0.1	0.0
Total Delay				17.6	17.7	3.7		19.8			33.5	6.3
LOS				B	B	A		B			C	A
Approach Delay					16.3			19.8			28.4	
Approach LOS					B			B			C	
Queue Length 50th (ft)				56	110	0		39			160	0
Queue Length 95th (ft)				99	140	27		65			215	43
Internal Link Dist (ft)		225			555			207			269	
Turn Bay Length (ft)												
Base Capacity (vph)				639	2339	781		1180			990	536
Starvation Cap Reductn				0	0	0		0			0	0
Spillback Cap Reductn				0	0	0		0			43	0
Storage Cap Reductn				0	0	0		0			0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio				0.24	0.33	0.13		0.16			0.59	0.24

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 30 (30%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 21.0		Intersection LOS: C	
Intersection Capacity Utilization 42.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 47: Bowie St & Commerce St



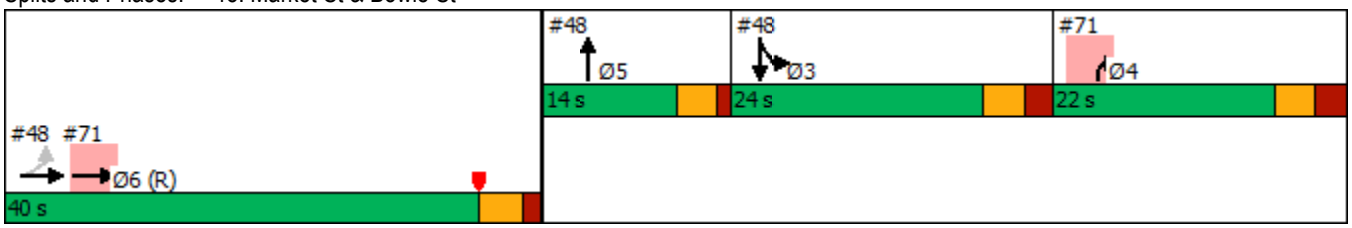


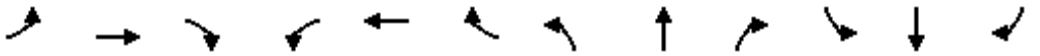
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	162	1029	9	0	0	0	0	42	87	575	30	0
Future Volume (vph)	162	1029	9	0	0	0	0	42	87	575	30	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	5045	0	0	0	0	0	1693	0	1681	1694	0
Flt Permitted		0.993								0.950	0.957	
Satd. Flow (perm)	0	5045	0	0	0	0	0	1693	0	1681	1694	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		1										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1147			167			284			287	
Travel Time (s)		26.1			3.8			6.5			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)										47%		
Lane Group Flow (vph)	0	1304	0	0	0	0	0	141	0	331	327	0
Turn Type	Perm	NA						NA		Split	NA	
Protected Phases		6						5		3	3	
Permitted Phases	6											
Detector Phase	6	6						5		3	3	
Switch Phase												
Minimum Initial (s)	10.0	10.0						3.0		5.0	5.0	
Minimum Split (s)	25.0	25.0						12.0		22.0	22.0	
Total Split (s)	40.0	40.0						14.0		24.0	24.0	
Total Split (%)	40.0%	40.0%						14.0%		24.0%	24.0%	
Yellow Time (s)	3.2	3.2						3.0		3.2	3.2	
All-Red Time (s)	1.5	1.5						1.0		2.1	2.1	
Lost Time Adjust (s)		-0.7						-1.1		-1.3	-1.5	
Total Lost Time (s)		4.0						2.9		4.0	3.8	
Lead/Lag								Lead		Lag	Lag	
Lead-Lag Optimize?								Yes		Yes	Yes	
Recall Mode	C-Min	C-Min						None		None	None	
Act Effct Green (s)		51.0						13.4		24.7	24.9	
Actuated g/C Ratio		0.51						0.13		0.25	0.25	
v/c Ratio		0.51						0.62		0.80	0.78	
Control Delay		13.5						52.2		42.1	39.6	
Queue Delay		0.0						0.0		0.1	0.3	
Total Delay		13.5						52.2		42.3	39.9	
LOS		B						D		D	D	
Approach Delay		13.5						52.2			41.1	
Approach LOS		B						D			D	
Queue Length 50th (ft)		107						86		71	70	
Queue Length 95th (ft)		160						141		#376	#366	
Internal Link Dist (ft)		1067			87			204			207	
Turn Bay Length (ft)												
Base Capacity (vph)		2572						237		414	421	
Starvation Cap Reductn		0						0		2	5	
Spillback Cap Reductn		0						0		0	0	
Storage Cap Reductn		0						0		0	0	
Reduced v/c Ratio		0.51						0.59		0.80	0.79	

Lane Group	Ø4
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	4
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	12.0
Total Split (s)	22.0
Total Split (%)	22%
Yellow Time (s)	3.0
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 18 (18%), Referenced to phase 2: and 6:EBTL, Start of Yellow		
Natural Cycle: 75		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.80		
Intersection Signal Delay: 24.7	Intersection LOS: C	
Intersection Capacity Utilization 57.6%	ICU Level of Service B	
Analysis Period (min) 15		
# 95th percentile volume exceeds capacity, queue may be longer.		
Queue shown is maximum after two cycles.		

Splits and Phases: 48: Market St & Bowie St



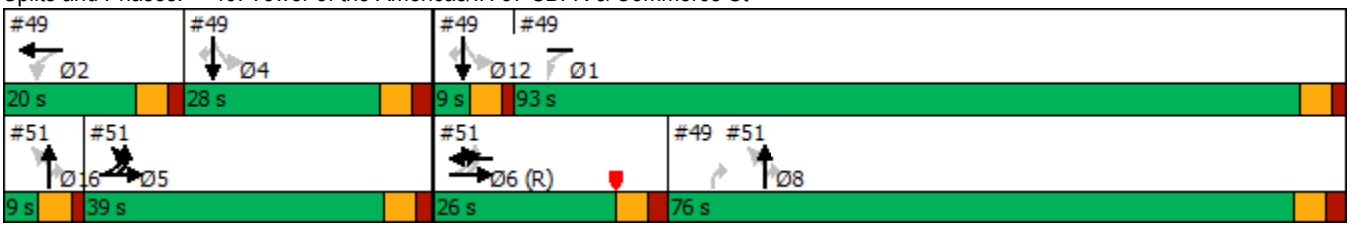


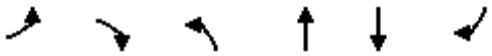
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	123	637	0	0	0	214	84	17	363
Future Volume (vph)	0	0	0	123	637	0	0	0	214	84	17	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	0	0	0	3511	0	0	0	1611	0	3398	1583
Flt Permitted					0.992						0.960	
Satd. Flow (perm)	0	0	0	0	3511	0	0	0	1611	0	3398	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)												317
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		635			283			336			353	
Travel Time (s)		14.4			6.4			7.6			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	826	0	0	0	233	0	109	395
Turn Type				Perm	NA				Perm	Perm	NA	Perm
Protected Phases					1 2						4 12	
Permitted Phases				1 2					8	4 12		4 12
Detector Phase				1 2	1 2				8	4 12	4 12	4 12
Switch Phase												
Minimum Initial (s)									5.0			
Minimum Split (s)									38.0			
Total Split (s)									76.0			
Total Split (%)									50.7%			
Yellow Time (s)									3.6			
All-Red Time (s)									2.4			
Lost Time Adjust (s)									-1.3			
Total Lost Time (s)									4.7			
Lead/Lag									Lag			
Lead-Lag Optimize?									Yes			
Recall Mode									None			
Act Effct Green (s)					89.0				56.1		53.0	53.0
Actuated g/C Ratio					0.59				0.37		0.35	0.35
v/c Ratio					0.40				0.39		0.09	0.52
Control Delay					21.7				34.8		36.3	12.0
Queue Delay					52.0				1.3		0.0	0.0
Total Delay					73.7				36.1		36.3	12.0
LOS					E				D		D	B
Approach Delay					73.7			36.1			17.3	
Approach LOS					E			D			B	
Queue Length 50th (ft)					337				166		37	52
Queue Length 95th (ft)					357				202		72	182
Internal Link Dist (ft)		555			203			256			273	
Turn Bay Length (ft)												
Base Capacity (vph)					2238				765		1199	763
Starvation Cap Reductn					1518				345		0	0
Spillback Cap Reductn					0				10		2	0
Storage Cap Reductn					0				0		0	0
Reduced v/c Ratio					1.15				0.55		0.09	0.52

Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø12	Ø16
Lane Configurations							
Traffic Volume (vph)							
Future Volume (vph)							
Ideal Flow (vphpl)							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Turn Type							
Protected Phases	1	2	4	5	6	12	16
Permitted Phases							
Detector Phase							
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	1.0	1.0
Minimum Split (s)	37.3	19.3	27.0	37.7	23.7	6.1	7.4
Total Split (s)	93.0	20.0	28.0	39.0	26.0	9.0	9.0
Total Split (%)	62%	13%	19%	26%	17%	6%	6%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.7	1.7	2.4	2.1	2.1	1.5	1.5
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	None	None
Act Effct Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Queue Length 50th (ft)							
Queue Length 95th (ft)							
Internal Link Dist (ft)							
Turn Bay Length (ft)							
Base Capacity (vph)							
Starvation Cap Reductn							
Spillback Cap Reductn							
Storage Cap Reductn							
Reduced v/c Ratio							

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 31 (21%), Referenced to phase 6:EBWB, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 49.9	Intersection LOS: D
Intersection Capacity Utilization 50.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 49: Tower of the Americas/IH 37 SBFR & Commerce St





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	192	1465	0	0	142	0
Future Volume (vph)	192	1465	0	0	142	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1770	2787	0	0	3539	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	2787	0	0	3539	0
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	647			629	336	
Travel Time (s)	14.7			14.3	7.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	209	1592	0	0	154	0
Turn Type	Prot	Prot			NA	
Protected Phases	6	6			8	
Permitted Phases						
Detector Phase	6	6			8	
Switch Phase						
Minimum Initial (s)	10.0	10.0			6.0	
Minimum Split (s)	21.0	21.0			27.3	
Total Split (s)	72.0	72.0			28.0	
Total Split (%)	72.0%	72.0%			28.0%	
Yellow Time (s)	3.6	3.6			3.6	
All-Red Time (s)	2.0	2.0			2.7	
Lost Time Adjust (s)	-1.6	-1.6			-2.3	
Total Lost Time (s)	4.0	4.0			4.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min	C-Min			None	
Act Effct Green (s)	81.7	81.7			10.3	
Actuated g/C Ratio	0.82	0.82			0.10	
v/c Ratio	0.14	0.70			0.42	
Control Delay	2.3	6.2			45.4	
Queue Delay	0.0	0.5			0.0	
Total Delay	2.3	6.6			45.4	
LOS	A	A			D	
Approach Delay	6.1				45.4	
Approach LOS	A				D	
Queue Length 50th (ft)	20	177			49	
Queue Length 95th (ft)	40	292			78	
Internal Link Dist (ft)	567			549	256	
Turn Bay Length (ft)						
Base Capacity (vph)	1446	2277			849	
Starvation Cap Reductn	0	266			0	
Spillback Cap Reductn	0	0			0	
Storage Cap Reductn	0	0			0	
Reduced v/c Ratio	0.14	0.79			0.18	

Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 0 (0%), Referenced to phase 2: and 6:EBL, Start of Green		
Natural Cycle: 80		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.70		
Intersection Signal Delay: 9.2	Intersection LOS: A	
Intersection Capacity Utilization 62.9%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 50: Market St & Tower of the Americas





Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	NBL	NBT	NBR	Ø1	Ø2	Ø4
Lane Configurations												
Traffic Volume (vph)	93	28	176	335	157	51	432	548	92			
Future Volume (vph)	93	28	176	335	157	51	432	548	92			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Storage Length (ft)		0			100		0		0			
Storage Lanes		1			1		2		1			
Taper Length (ft)		25					25					
Satd. Flow (prot)	0	1770	1863	3539	1583	0	3433	1863	1583			
Flt Permitted		0.437					0.950					
Satd. Flow (perm)	0	814	1863	3539	1583	0	3433	1863	1583			
Right Turn on Red						No			Yes			
Satd. Flow (RTOR)									139			
Link Speed (mph)			30	30				30				
Link Distance (ft)			283	712				755				
Travel Time (s)			6.4	16.2				17.2				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	131	191	364	226	0	470	596	100			
Turn Type	D.P+P	D.P+P	NA	NA	Prot		Perm	NA	Perm			
Protected Phases	5	5	5 6	6	6			8 16		1	2	4
Permitted Phases	6	6					8 16		8 16			
Detector Phase	5	5	5 6	6	6		8 16	8 16	8 16			
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0					5.0	5.0	5.0
Minimum Split (s)	37.7	37.7		23.7	23.7					37.3	19.3	27.0
Total Split (s)	39.0	39.0		26.0	26.0					93.0	20.0	28.0
Total Split (%)	26.0%	26.0%		17.3%	17.3%					62%	13%	19%
Yellow Time (s)	3.6	3.6		3.6	3.6					3.6	3.6	3.6
All-Red Time (s)	2.1	2.1		2.1	2.1					1.7	1.7	2.4
Lost Time Adjust (s)		-1.7		-1.7	-1.7							
Total Lost Time (s)		4.0		4.0	4.0							
Lead/Lag	Lag	Lag		Lead	Lead					Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes					Yes	Yes	Yes
Recall Mode	None	None		C-Max	C-Max					None	None	None
Act Effct Green (s)		65.2	69.2	45.9	45.9		70.8	72.8	70.8			
Actuated g/C Ratio		0.43	0.46	0.31	0.31		0.47	0.49	0.47			
v/c Ratio		0.28	0.22	0.34	0.47		0.29	0.66	0.12			
Control Delay		45.8	46.4	45.3	49.7		23.9	32.3	1.1			
Queue Delay		0.1	2.0	2.9	0.0		0.0	0.0	0.0			
Total Delay		46.0	48.4	48.3	49.7		23.9	32.3	1.1			
LOS		D	D	D	D		C	C	A			
Approach Delay			47.4	48.8				26.3				
Approach LOS			D	D				C				
Queue Length 50th (ft)		98	181	144	179		138	420	0			
Queue Length 95th (ft)		151	204	239	#397		162	506	11			
Internal Link Dist (ft)			203	632				675				
Turn Bay Length (ft)					100							
Base Capacity (vph)		594	858	1082	484		1699	946	853			
Starvation Cap Reductn		102	527	0	0		0	0	0			

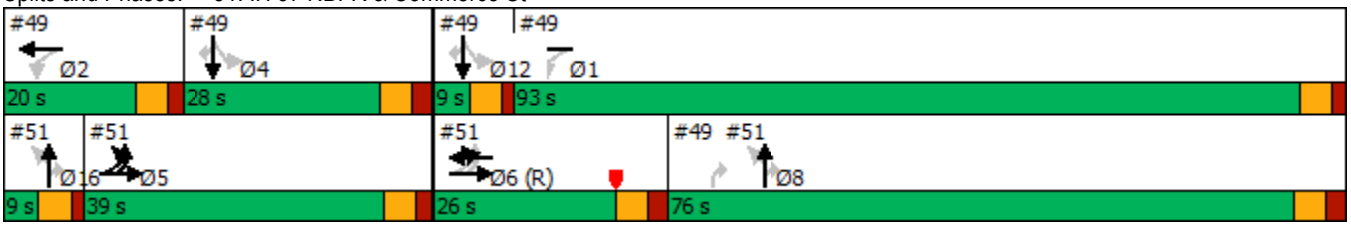
Lane Group	Ø8	Ø12	Ø16
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	8	12	16
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	1.0	1.0
Minimum Split (s)	38.0	6.1	7.4
Total Split (s)	76.0	9.0	9.0
Total Split (%)	51%	6%	6%
Yellow Time (s)	3.6	3.6	3.6
All-Red Time (s)	2.4	1.5	1.5
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes
Recall Mode	None	None	None
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			



Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	NBL	NBT	NBR	Ø1	Ø2	Ø4
Spillback Cap Reductn		0	0	595	0		0	0	0			
Storage Cap Reductn		0	0	0	0		0	0	0			
Reduced v/c Ratio		0.27	0.58	0.75	0.47		0.28	0.63	0.12			

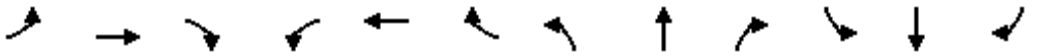
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 31 (21%), Referenced to phase 6:EBWB, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 36.0		Intersection LOS: D	
Intersection Capacity Utilization 58.4%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 51: IH 37 NBFR & Commerce St



Lane Group	Ø8	Ø12	Ø16
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

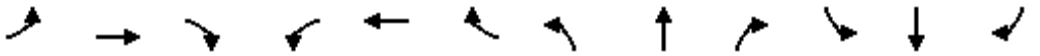


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	216	33	12	431	7	25	9	12	7	3	87
Future Volume (vph)	19	216	33	12	431	7	25	9	12	7	3	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3462	0	0	3529	0	1770	1704	0	0	1631	0
Flt Permitted		0.909			0.945		0.506				0.974	
Satd. Flow (perm)	0	3159	0	0	3338	0	943	1704	0	0	1595	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			3			13			95	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		712			691			421			307	
Travel Time (s)		16.2			15.7			9.6			7.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	292	0	0	489	0	27	23	0	0	106	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	45.0	45.0		45.0	45.0		20.0	20.0		20.0	20.0	
Total Split (s)	68.0	68.0		68.0	68.0		32.0	32.0		32.0	32.0	
Total Split (%)	68.0%	68.0%		68.0%	68.0%		32.0%	32.0%		32.0%	32.0%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.4	1.4		1.4	1.4		1.8	1.8		1.8	1.8	
Lost Time Adjust (s)		-0.6			-0.6		-1.0	-1.0			-1.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		84.1			84.1		7.9	7.9			7.9	
Actuated g/C Ratio		0.84			0.84		0.08	0.08			0.08	
v/c Ratio		0.11			0.17		0.36	0.16			0.50	
Control Delay		1.4			1.7		57.2	29.0			19.8	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		1.4			1.7		57.2	29.0			19.8	
LOS		A			A		E	C			B	
Approach Delay		1.4			1.7			44.2			19.8	
Approach LOS		A			A			D			B	
Queue Length 50th (ft)		9			18		17	6			7	
Queue Length 95th (ft)		20			35		44	30			57	
Internal Link Dist (ft)		632			611			341			227	
Turn Bay Length (ft)												
Base Capacity (vph)		2662			2808		264	486			515	
Starvation Cap Reductn		0			0		0	0			0	
Spillback Cap Reductn		0			0		0	0			0	
Storage Cap Reductn		0			0		0	0			0	
Reduced v/c Ratio		0.11			0.17		0.10	0.05			0.21	

Intersection Summary		
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 10 (10%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow		
Natural Cycle: 65		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.50		
Intersection Signal Delay: 5.9	Intersection LOS: A	
Intersection Capacity Utilization 40.6%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 52: Hoefgen St & Commerce St

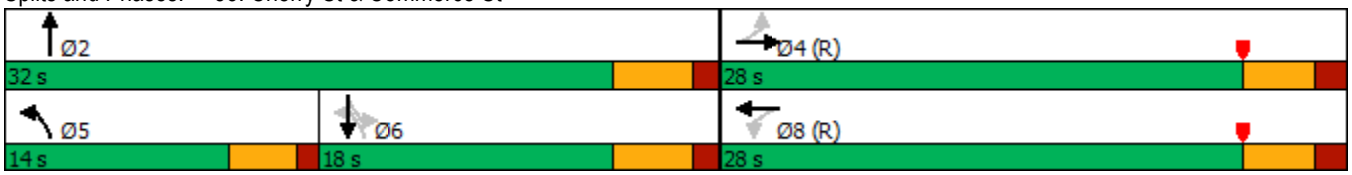


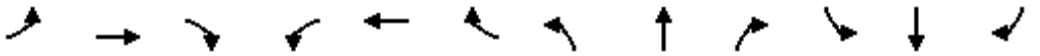


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	199	13	69	286	17	35	86	53	55	288	24
Future Volume (vph)	48	199	13	69	286	17	35	86	53	55	288	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3483	0	0	3483	0	0	3343	0	0	3479	0
Flt Permitted		0.847			0.852			0.824			0.874	
Satd. Flow (perm)	0	2977	0	0	2994	0	0	2782	0	0	3062	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			9			58			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		691			236			259			1425	
Travel Time (s)		15.7			5.4			5.9			32.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	282	0	0	404	0	0	189	0	0	399	0
Turn Type	Perm	NA		Perm	NA		D.P+P	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			6			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		3.0	10.0		10.0	10.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		12.0	22.0		14.9	14.9	
Total Split (s)	28.0	28.0		28.0	28.0		14.0	32.0		18.0	18.0	
Total Split (%)	46.7%	46.7%		46.7%	46.7%		23.3%	53.3%		30.0%	30.0%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.0	3.6		3.6	3.6	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.3		1.3	1.3	
Lost Time Adjust (s)		-0.7			-0.7			-0.9			-0.9	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	Min		Min	Min	
Act Effct Green (s)		38.7			38.7			13.3			13.3	
Actuated g/C Ratio		0.64			0.64			0.22			0.22	
v/c Ratio		0.15			0.21			0.29			0.58	
Control Delay		4.7			5.0			13.9			13.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		4.7			5.0			13.9			13.4	
LOS		A			A			B			B	
Approach Delay		4.7			5.0			13.9			13.4	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)		16			24			20			24	
Queue Length 95th (ft)		35			50			40			36	
Internal Link Dist (ft)		611			156			179			1345	
Turn Bay Length (ft)												
Base Capacity (vph)		1925			1936			1329			757	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.15			0.21			0.14			0.53	

Intersection Summary		
Area Type:	Other	
Cycle Length: 60		
Actuated Cycle Length: 60		
Offset: 2 (3%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow		
Natural Cycle: 50		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.58		
Intersection Signal Delay: 8.9		Intersection LOS: A
Intersection Capacity Utilization 49.7%		ICU Level of Service A
Analysis Period (min) 15		

Splits and Phases: 53: Cherry St & Commerce St



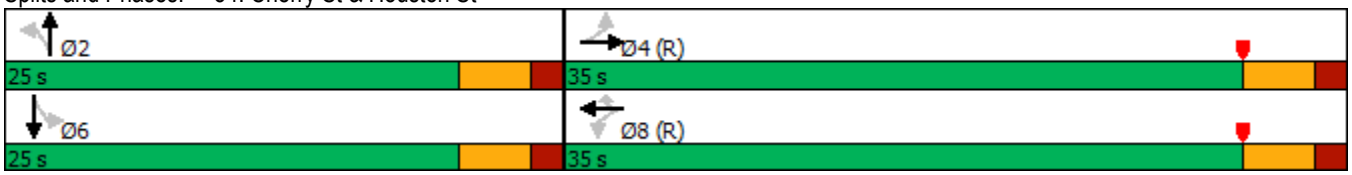


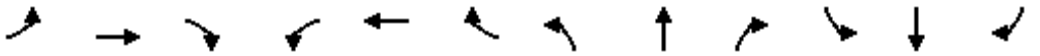
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	217	82	36	139	35	23	155	26	29	265	6
Future Volume (vph)	8	217	82	36	139	35	23	155	26	29	265	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3357	0	0	1844	1583	0	3432	0	0	3506	0
Flt Permitted		0.949			0.901			0.885			0.902	
Satd. Flow (perm)	0	3187	0	0	1672	1518	0	3044	0	0	3171	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		89				38		28			4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		480			472			1425			459	
Travel Time (s)		10.9			10.7			32.4			10.4	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	334	0	0	190	38	0	221	0	0	327	0
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	6.0	6.0		6.0	6.0	
Minimum Split (s)	25.0	25.0		25.0	25.0	25.0	18.0	18.0		18.0	18.0	
Total Split (s)	35.0	35.0		35.0	35.0	35.0	25.0	25.0		25.0	25.0	
Total Split (%)	58.3%	58.3%		58.3%	58.3%	58.3%	41.7%	41.7%		41.7%	41.7%	
Yellow Time (s)	3.2	3.2		3.2	3.2	3.2	3.2	3.2		3.2	3.2	
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-0.7			-0.7	-0.7		-0.7			-0.7	
Total Lost Time (s)		4.0			4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Min	Min		Min	Min	
Act Effct Green (s)		40.9			40.9	40.9		11.1			11.1	
Actuated g/C Ratio		0.68			0.68	0.68		0.18			0.18	
v/c Ratio		0.15			0.17	0.04		0.38			0.55	
Control Delay		3.0			3.7	1.3		16.9			25.2	
Queue Delay		0.0			0.0	0.0		0.0			0.0	
Total Delay		3.0			3.7	1.3		16.9			25.2	
LOS		A			A	A		B			C	
Approach Delay		3.0			3.3			16.9			25.2	
Approach LOS		A			A			B			C	
Queue Length 50th (ft)		12			17	0		25			56	
Queue Length 95th (ft)		29			39	5		43			85	
Internal Link Dist (ft)		400			392			1345			379	
Turn Bay Length (ft)												
Base Capacity (vph)		2199			1139	1046		1083			1112	
Starvation Cap Reductn		0			0	0		0			0	
Spillback Cap Reductn		0			0	0		0			0	
Storage Cap Reductn		0			0	0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.15			0.17	0.04		0.20			0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 29 (48%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 12.3		Intersection LOS: B	
Intersection Capacity Utilization 66.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 54: Cherry St & Houston St



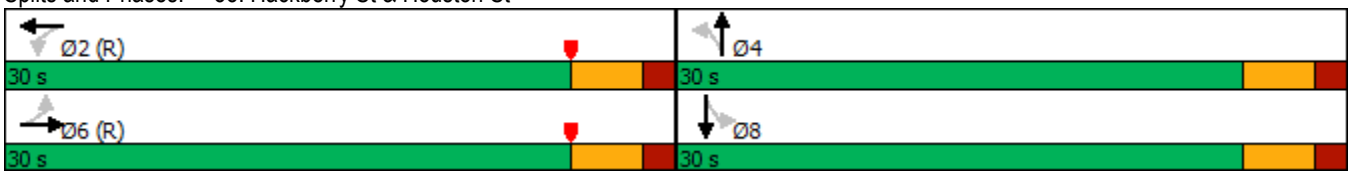


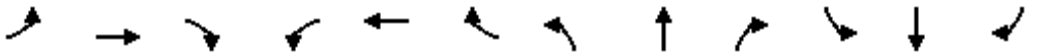
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	226	42	52	172	37	21	195	60	32	221	6
Future Volume (vph)	15	226	42	52	172	37	21	195	60	32	221	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3429	0	0	3409	0	0	3377	0	0	3500	0
Flt Permitted		0.938			0.854			0.908			0.872	
Satd. Flow (perm)	0	3222	0	0	2929	0	0	3073	0	0	3063	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42			39			65			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		467			472			521			463	
Travel Time (s)		10.6			10.7			11.8			10.5	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	308	0	0	284	0	0	300	0	0	282	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-0.7			-0.7			-0.7			-0.7	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		42.4			42.4			9.6			9.6	
Actuated g/C Ratio		0.71			0.71			0.16			0.16	
v/c Ratio		0.13			0.14			0.55			0.57	
Control Delay		2.3			4.5			21.5			27.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		2.3			4.5			21.5			27.1	
LOS		A			A			C			C	
Approach Delay		2.3			4.5			21.5			27.1	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		8			23			41			49	
Queue Length 95th (ft)		19			44			70			77	
Internal Link Dist (ft)		387			392			441			383	
Turn Bay Length (ft)												
Base Capacity (vph)		2287			2079			1368			1330	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.13			0.14			0.22			0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 55 (92%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 13.7		Intersection LOS: B	
Intersection Capacity Utilization 65.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 55: Hackberry St & Houston St





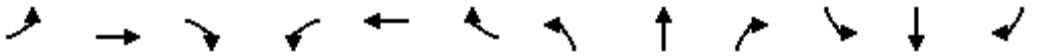
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	286	10	22	236	37	1	40	14	44	85	11
Future Volume (vph)	13	286	10	22	236	37	1	40	14	44	85	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1849	0	1770	1807	0	0	1757	0	0	1805	0
Flt Permitted	0.579			0.566				0.996			0.872	
Satd. Flow (perm)	1039	1849	0	1017	1807	0	0	1751	0	0	1568	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			25			15			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		483			2820			472			467	
Travel Time (s)		11.0			64.1			10.7			10.6	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	322	0	24	297	0	0	59	0	0	152	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		13.0	13.0		13.0	13.0	
Total Split (s)	42.0	42.0		42.0	42.0		18.0	18.0		18.0	18.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-0.4	-0.4		-0.4	-0.4			-0.4			-0.4	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.3			4.3	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)	45.1	45.1		45.1	45.1			9.6			9.6	
Actuated g/C Ratio	0.75	0.75		0.75	0.75			0.16			0.16	
v/c Ratio	0.02	0.23		0.03	0.22			0.20			0.59	
Control Delay	5.4	6.2		3.7	3.7			18.0			31.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	5.4	6.2		3.7	3.7			18.0			31.5	
LOS	A	A		A	A			B			C	
Approach Delay		6.1			3.7			18.0			31.5	
Approach LOS		A			A			B			C	
Queue Length 50th (ft)	2	63		2	26			14			50	
Queue Length 95th (ft)	9	102		9	65			38			92	
Internal Link Dist (ft)		403			2740			392			387	
Turn Bay Length (ft)				150								
Base Capacity (vph)	780	1390		763	1363			411			363	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.02	0.23		0.03	0.22			0.14			0.42	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 32 (53%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 10.5		Intersection LOS: B	
Intersection Capacity Utilization 39.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 56: Pine St & Houston St



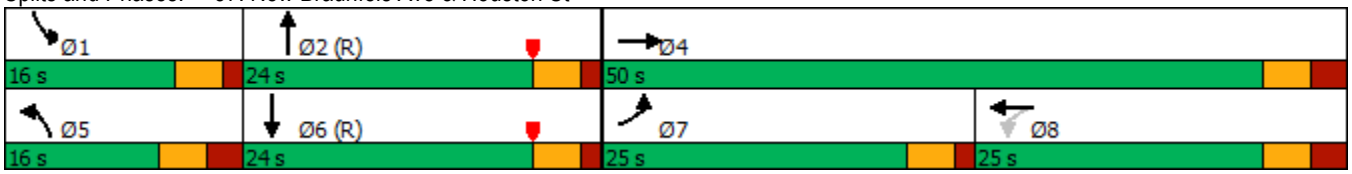


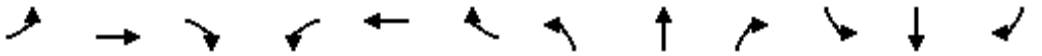
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	173	75	78	160	59	80	385	55	70	487	91
Future Volume (vph)	111	173	75	78	160	59	80	385	55	70	487	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	220		0	220		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1777	0	1770	1788	0	1770	3472	0	1770	3454	0
Flt Permitted	0.950			0.593			0.950			0.950		
Satd. Flow (perm)	1770	1777	0	1105	1788	0	1770	3472	0	1770	3454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36			19			16			22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2820			1473			922			669	
Travel Time (s)		64.1			33.5			21.0			15.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	270	0	85	238	0	87	478	0	76	628	0
Turn Type	Prot	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases				8								
Detector Phase	7	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		3.0	10.0		3.0	10.0	
Minimum Split (s)	25.0	25.0		20.0	20.0		15.0	20.0		15.0	20.0	
Total Split (s)	25.0	50.0		25.0	25.0		16.0	24.0		16.0	24.0	
Total Split (%)	27.8%	55.6%		27.8%	27.8%		17.8%	26.7%		17.8%	26.7%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.4	2.5		2.5	2.5		2.5	1.4		1.4	1.4	
Lost Time Adjust (s)	-1.7	-1.7		-1.7	-1.7		-0.6	-0.6		-0.6	-0.6	
Total Lost Time (s)	2.9	4.0		4.0	4.0		5.1	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	10.8	29.9		16.2	16.2		8.0	42.2		7.4	40.8	
Actuated g/C Ratio	0.12	0.33		0.18	0.18		0.09	0.47		0.08	0.45	
v/c Ratio	0.57	0.44		0.43	0.71		0.56	0.29		0.52	0.40	
Control Delay	47.2	21.0		35.7	40.3		52.1	17.8		51.6	20.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	47.2	21.0		35.7	40.3		52.1	17.8		51.6	20.0	
LOS	D	C		D	D		D	B		D	B	
Approach Delay		29.1			39.1			23.1			23.4	
Approach LOS		C			D			C			C	
Queue Length 50th (ft)	66	102		40	102		48	84		42	121	
Queue Length 95th (ft)	115	138		71	176		92	159		83	220	
Internal Link Dist (ft)		2740			1393			842			589	
Turn Bay Length (ft)	150			150			220			220		
Base Capacity (vph)	434	925		261	437		218	1637		236	1579	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.28	0.29		0.33	0.54		0.40	0.29		0.32	0.40	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 55 (61%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 27.0		Intersection LOS: C	
Intersection Capacity Utilization 53.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 57: New Braunfels Ave & Houston St





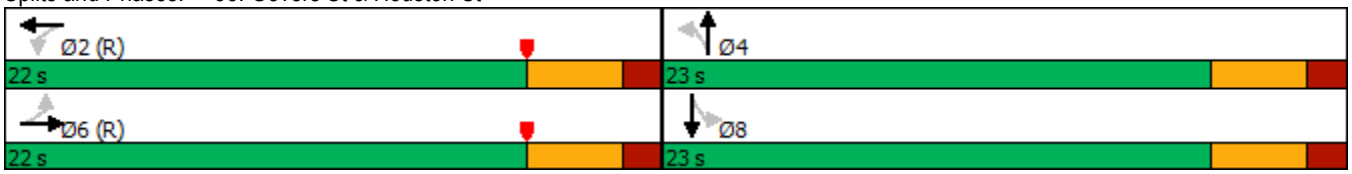
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	294	23	35	249	6	32	37	31	5	35	6
Future Volume (vph)	8	294	23	35	249	6	32	37	31	5	35	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1834	0	1770	1853	0	0	1725	0	0	1804	0
Flt Permitted	0.589			0.554				0.874			0.970	
Satd. Flow (perm)	1068	1834	0	1008	1853	0	0	1515	0	0	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			3			34			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1473			1426			502			301	
Travel Time (s)		33.5			32.4			11.4			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	345	0	38	278	0	0	109	0	0	50	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		12.0	12.0		12.0	12.0	
Total Split (s)	22.0	22.0		22.0	22.0		23.0	23.0		23.0	23.0	
Total Split (%)	48.9%	48.9%		48.9%	48.9%		51.1%	51.1%		51.1%	51.1%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3		1.3	1.3		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-0.5	-0.5		-0.5	-0.5			-0.6			-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)	35.4	35.4		35.4	35.4			7.4			7.4	
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.16			0.16	
v/c Ratio	0.01	0.24		0.05	0.19			0.39			0.17	
Control Delay	1.9	2.0		2.2	2.1			16.6			15.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	1.9	2.0		2.2	2.1			16.6			15.3	
LOS	A	A		A	A			B			B	
Approach Delay		2.0			2.1			16.6			15.3	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)	1	53		2	17			18			10	
Queue Length 95th (ft)	m2	28		m6	31			48			29	
Internal Link Dist (ft)		1393			1346			422			221	
Turn Bay Length (ft)	150			150								
Base Capacity (vph)	840	1445		793	1459			659			744	

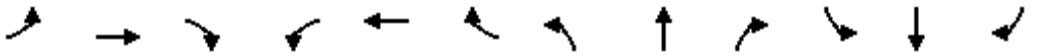
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.01	0.24		0.05	0.19			0.17			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 35 (78%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay: 4.8		Intersection LOS: A	
Intersection Capacity Utilization 49.7%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 58: Gevers St & Houston St



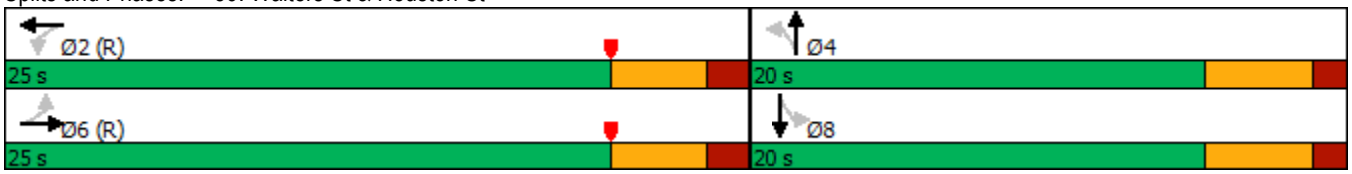


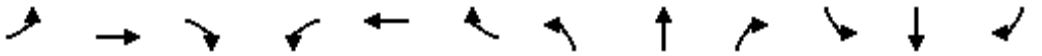
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	211	27	13	194	67	13	292	19	99	429	53
Future Volume (vph)	59	211	27	13	194	67	13	292	19	99	429	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1825	0	1770	1775	0	0	3487	0	0	3441	0
Flt Permitted	0.577			0.600				0.923			0.822	
Satd. Flow (perm)	1060	1825	0	1102	1775	0	0	3223	0	0	2838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			52			16			26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1426			746			543			299	
Travel Time (s)		32.4			17.0			12.3			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	258	0	14	284	0	0	352	0	0	632	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		14.8	14.8		14.8	14.8	
Total Split (s)	25.0	25.0		25.0	25.0		20.0	20.0		20.0	20.0	
Total Split (%)	55.6%	55.6%		55.6%	55.6%		44.4%	44.4%		44.4%	44.4%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.2	1.2		1.2	1.2	
Lost Time Adjust (s)	-0.7	-0.7		-0.7	-0.7			-0.8			-0.8	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)	21.9	21.9		21.9	21.9			15.1			15.1	
Actuated g/C Ratio	0.49	0.49		0.49	0.49			0.34			0.34	
v/c Ratio	0.12	0.29		0.03	0.32			0.32			0.65	
Control Delay	6.5	6.1		9.6	9.6			10.7			15.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	6.5	6.1		9.6	9.6			10.7			15.2	
LOS	A	A		A	A			B			B	
Approach Delay		6.2			9.6			10.7			15.2	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)	7	24		2	48			32			66	
Queue Length 95th (ft)	15	41		12	102			47			91	
Internal Link Dist (ft)		1346			666			463			219	
Turn Bay Length (ft)	100			150								
Base Capacity (vph)	536	933		557	924			1216			1078	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.12	0.28		0.03	0.31			0.29			0.59	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 5 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 11.4		Intersection LOS: B	
Intersection Capacity Utilization 66.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 59: Walters St & Houston St





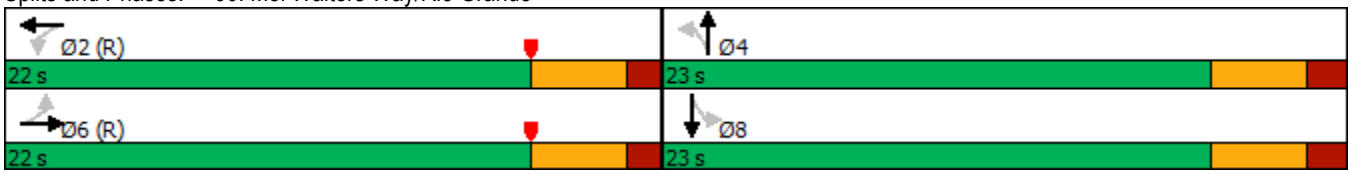
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	291	31	20	244	24	20	41	11	22	25	26
Future Volume (vph)	19	291	31	20	244	24	20	41	11	22	25	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1824	0	1770	1829	0	0	1783	0	0	1712	0
Flt Permitted	0.582			0.551				0.909			0.903	
Satd. Flow (perm)	1056	1824	0	1003	1829	0	0	1628	0	0	1553	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			13			12			28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		799			1332			494			300	
Travel Time (s)		18.2			30.3			11.2			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	350	0	22	291	0	0	79	0	0	79	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		12.0	12.0		12.0	12.0	
Total Split (s)	22.0	22.0		22.0	22.0		23.0	23.0		23.0	23.0	
Total Split (%)	48.9%	48.9%		48.9%	48.9%		51.1%	51.1%		51.1%	51.1%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-0.4	-0.4		-0.4	-0.4			-0.6			-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)	35.7	35.7		35.7	35.7			7.1			7.1	
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.16			0.16	
v/c Ratio	0.03	0.24		0.03	0.20			0.30			0.29	
Control Delay	2.1	2.1		3.0	3.0			17.6			14.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	2.1	2.1		3.0	3.0			17.6			14.9	
LOS	A	A		A	A			B			B	
Approach Delay		2.1			3.0			17.6			14.9	
Approach LOS		A			A			B			B	
Queue Length 50th (ft)	1	18		1	20			16			12	
Queue Length 95th (ft)	m3	29		7	48			42			38	
Internal Link Dist (ft)		719			1252			414			220	
Turn Bay Length (ft)	150			150								
Base Capacity (vph)	839	1451		796	1455			694			671	

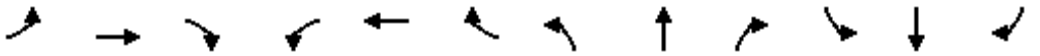
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.03	0.24		0.03	0.20			0.11			0.12	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 5 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay: 5.1		Intersection LOS: A	
Intersection Capacity Utilization 36.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 60: Mel Waiters Way/Rio Grande



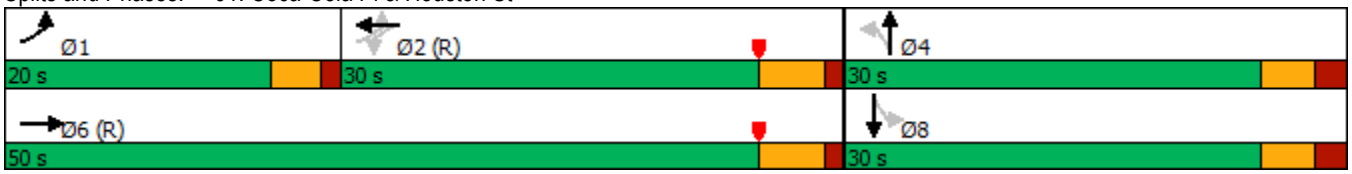


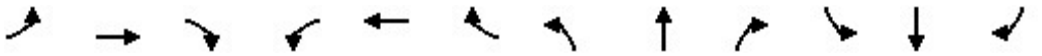
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	290	39	118	350	65	21	1	94	2	4	4
Future Volume (vph)	28	290	39	118	350	65	21	1	94	2	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		0	250		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3476	0	1770	3454	0	0	1777	1583	0	3294	0
Flt Permitted	0.491			0.538							0.899	
Satd. Flow (perm)	915	3476	0	1002	3454	0	0	1863	1583	0	2991	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			29				157		4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1094			1140			730			346	
Travel Time (s)		24.9			25.9			16.6			7.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	357	0	128	451	0	0	24	102	0	10	0
Turn Type	D.P+P	NA		Perm	NA		Perm	NA	Free	Perm	NA	
Protected Phases	1	6			2			4			8	
Permitted Phases	2			2			4		Free	8		
Detector Phase	1	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	14.0	35.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	20.0	50.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	25.0%	62.5%		37.5%	37.5%		37.5%	37.5%		37.5%	37.5%	
Yellow Time (s)	3.0	3.9		3.9	3.9		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-0.2	-1.1		-1.1	-1.1			-1.2			-1.2	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)	69.8	73.8		70.7	70.7			7.4	80.0		7.4	
Actuated g/C Ratio	0.87	0.92		0.88	0.88			0.09	1.00		0.09	
v/c Ratio	0.04	0.11		0.14	0.15			0.14	0.06		0.04	
Control Delay	1.4	0.9		3.0	2.1			35.4	0.1		27.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	1.4	0.9		3.0	2.1			35.4	0.1		27.3	
LOS	A	A		A	A			D	A		C	
Approach Delay		1.0			2.3			6.8			27.3	
Approach LOS		A			A			A			C	
Queue Length 50th (ft)	1	0		0	0			11	0		1	
Queue Length 95th (ft)	6	20		37	46			33	0		8	
Internal Link Dist (ft)		1014			1060			650			266	
Turn Bay Length (ft)	240			250								
Base Capacity (vph)	987	3207		885	3054			605	1583		974	
Starvation Cap Reductn	0	0		0	0			0	0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.03	0.11		0.14	0.15			0.04	0.06		0.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 10 (13%), Referenced to phase 2:EBWB and 6:EBT, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.15			
Intersection Signal Delay: 2.6		Intersection LOS: A	
Intersection Capacity Utilization 35.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 61: Coca-Cola Pl & Houston St



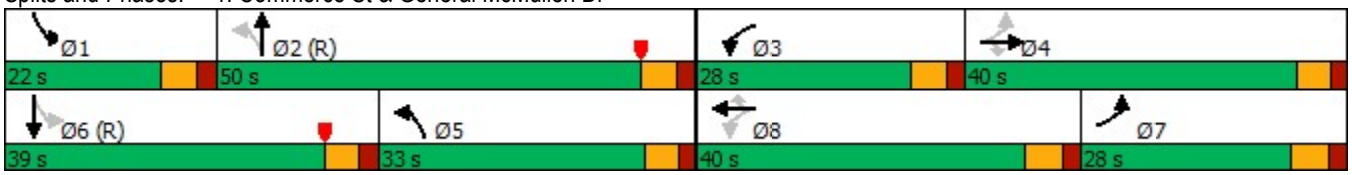


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	266	541	203	115	320	97	261	898	164	147	645	156
Future Volume (vph)	266	541	203	115	320	97	261	898	164	147	645	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	220		220	240		240	230		0	220		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt			0.850			0.850		0.977			0.971	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	4968	0	1770	4938	0
Flt Permitted	0.690			0.769			0.284			0.116		
Satd. Flow (perm)	1285	3539	1583	1432	3539	1583	529	4968	0	216	4938	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			242			157		28			39	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		692			1303			879			693	
Travel Time (s)		15.7			29.6			20.0			15.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	321	653	245	139	386	117	315	1083	198	177	778	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	321	653	245	139	386	117	315	1281	0	177	966	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	6.0	6.0	3.0	6.0	6.0	3.0	10.0		3.0	10.0	
Minimum Split (s)	9.0	37.4	37.4	8.7	36.7	36.7	8.7	37.7		8.7	37.7	
Total Split (s)	28.0	40.0	40.0	28.0	40.0	40.0	33.0	50.0		22.0	39.0	
Total Split (%)	20.0%	28.6%	28.6%	20.0%	28.6%	28.6%	23.6%	35.7%		15.7%	27.9%	
Maximum Green (s)	22.0	34.6	34.6	22.3	34.3	34.3	27.6	44.3		16.3	33.3	
Yellow Time (s)	3.9	3.6	3.6	3.9	3.9	3.9	3.6	3.6		3.6	3.6	
All-Red Time (s)	2.1	1.8	1.8	1.8	1.8	1.8	1.8	2.1		2.1	2.1	
Lost Time Adjust (s)	-0.7	-1.7	-1.7	-0.7	-1.7	-1.7	-0.8	-1.7		-0.8	-1.7	
Total Lost Time (s)	5.3	3.7	3.7	5.0	4.0	4.0	4.6	4.0		4.9	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Dont Walk (s)		25.0	25.0		24.0	24.0		25.0			25.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	32.3	33.9	33.9	19.6	20.6	20.6	59.6	60.2		48.5	49.4	
Actuated g/C Ratio	0.23	0.24	0.24	0.14	0.15	0.15	0.43	0.43		0.35	0.35	
v/c Ratio	0.82	0.76	0.43	0.59	0.74	0.32	0.71	0.60		0.77	0.55	
Control Delay	69.0	55.2	7.3	72.4	71.7	10.8	52.1	33.4		60.0	38.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	69.0	55.2	7.3	72.4	71.7	10.8	52.1	33.4		60.0	38.3	
LOS	E	E	A	E	E	B	D	C		E	D	
Approach Delay		49.2			60.7			37.1			41.7	
Approach LOS		D			E			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow, Master Intersection			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 44.8		Intersection LOS: D	
Intersection Capacity Utilization 74.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: Commerce St & General McMullen Dr

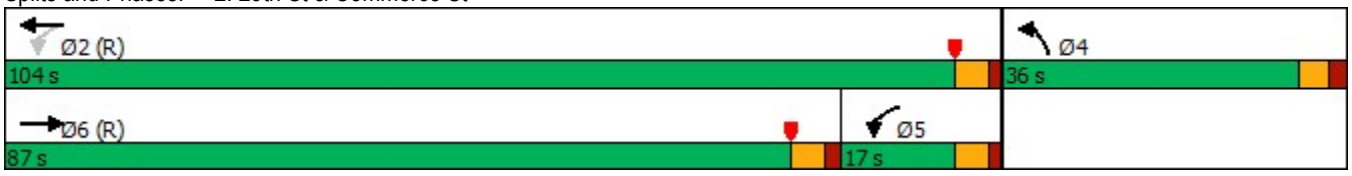


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	849	15	22	536	2	33
Future Volume (vph)	849	15	22	536	2	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		150	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor					0.94	
Frt	0.997				0.871	
Flt Protected			0.950		0.998	
Satd. Flow (prot)	3529	0	1770	3539	1521	0
Flt Permitted			0.264		0.998	
Satd. Flow (perm)	3529	0	492	3539	1518	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	2				40	
Link Speed (mph)	30			30	30	
Link Distance (ft)	1303			798	530	
Travel Time (s)	29.6			18.1	12.0	
Confl. Peds. (#/hr)					30	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	1024	18	27	647	2	40
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1042	0	27	647	42	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA		pm+pt	NA	Prot	
Protected Phases	6		5	2	4	
Permitted Phases			2			
Detector Phase	6		5	2	4	
Switch Phase						
Minimum Initial (s)	10.0		3.0	10.0	3.0	
Minimum Split (s)	19.1		8.1	15.1	29.3	
Total Split (s)	87.0		17.0	104.0	36.0	
Total Split (%)	62.1%		12.1%	74.3%	25.7%	
Maximum Green (s)	81.9		11.9	98.9	30.7	
Yellow Time (s)	3.6		3.6	3.6	3.2	
All-Red Time (s)	1.5		1.5	1.5	2.1	
Lost Time Adjust (s)	-0.6		-0.5	-0.6	-1.3	
Total Lost Time (s)	4.5		4.6	4.5	4.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	1.0		0.5	1.0	1.0	
Recall Mode	C-Min		None	C-Min	None	
Walk Time (s)	7.0				7.0	
Flash Dont Walk (s)	7.0				17.0	
Pedestrian Calls (#/hr)	0				0	
Act Effct Green (s)	122.6		127.9	128.2	6.0	
Actuated g/C Ratio	0.88		0.91	0.92	0.04	
v/c Ratio	0.34		0.06	0.20	0.41	
Control Delay	2.4		1.6	1.3	31.4	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	2.4		1.6	1.3	31.4	
LOS	A		A	A	C	
Approach Delay	2.4			1.3	31.4	
Approach LOS	A			A	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 56 (40%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 2.7		Intersection LOS: A	
Intersection Capacity Utilization 48.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: 29th St & Commerce St

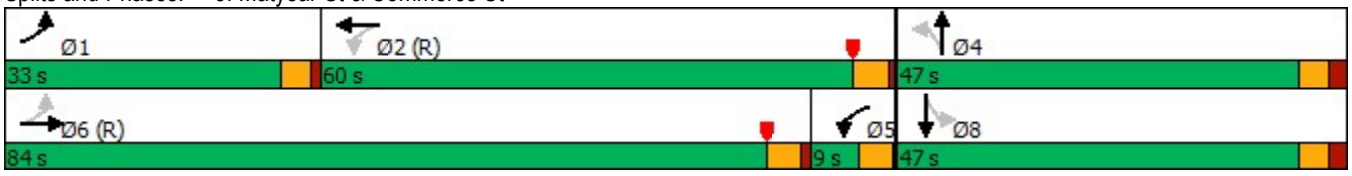


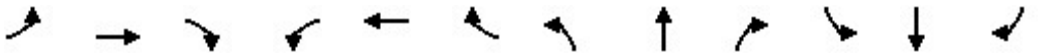
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	779	2	4	454	92	5	10	5	77	4	55
Future Volume (vph)	99	779	2	4	454	92	5	10	5	77	4	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	150		0	0		0	150		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.97		0.95	0.94	
Frt					0.975			0.966			0.861	
Flt Protected	0.950			0.950				0.988		0.950		
Satd. Flow (prot)	1770	3539	0	1770	3451	0	0	1751	0	1770	1512	0
Flt Permitted	0.371			0.304				0.933		0.852		
Satd. Flow (perm)	691	3539	0	566	3451	0	0	1634	0	1510	1512	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					20			6			66	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		798			1731			484			302	
Travel Time (s)		18.1			39.3			11.0			6.9	
Confl. Peds. (#/hr)							30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	119	940	2	5	548	111	6	12	6	93	5	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	942	0	5	659	0	0	24	0	93	71	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0		5.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	8.1	37.1		9.0	18.6		30.3	30.3		30.3	30.3	
Total Split (s)	33.0	84.0		9.0	60.0		47.0	47.0		47.0	47.0	
Total Split (%)	23.6%	60.0%		6.4%	42.9%		33.6%	33.6%		33.6%	33.6%	
Maximum Green (s)	28.8	79.4		5.0	55.4		41.7	41.7		41.7	41.7	
Yellow Time (s)	3.0	3.6		3.5	3.6		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.0		0.5	1.0		2.1	2.1		2.1	2.1	
Lost Time Adjust (s)	-0.2	-0.6		-0.6	-0.6			-1.3		-1.3	-1.3	
Total Lost Time (s)	4.0	4.0		3.4	4.0			4.0		4.0	4.0	
Lead/Lag	Lead	Lead		Lag	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	1.0	1.0		3.0	1.0		1.0	1.0		1.0	1.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		7.0			7.0		18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	114.0	114.0		107.7	107.1			14.8		14.8	14.8	
Actuated g/C Ratio	0.81	0.81		0.77	0.76			0.11		0.11	0.11	
v/c Ratio	0.20	0.33		0.01	0.25			0.14		0.58	0.33	
Control Delay	2.1	4.0		2.8	2.2			45.2		73.3	17.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Delay	2.1	4.0		2.8	2.2			45.2		73.3	17.7	
LOS	A	A		A	A			D		E	B	
Approach Delay		3.8			2.2			45.2			49.3	
Approach LOS		A			A			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 114 (81%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 7.7		Intersection LOS: A	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Matyear St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	500	105	57	324	69	83	333	57	81	261	118
Future Volume (vph)	219	500	105	57	324	69	83	333	57	81	261	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	150		0	150		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.97	0.99			0.99		0.97	0.99		0.98	0.98	
Frt		0.974			0.974			0.978			0.953	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3408	0	1770	3404	0	1770	3427	0	1770	3301	0
Flt Permitted	0.481			0.272			0.489			0.345		
Satd. Flow (perm)	868	3408	0	507	3404	0	883	3427	0	630	3301	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			19			13			49	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1731			463			490			331	
Travel Time (s)		39.3			10.5			11.1			7.5	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	264	603	127	69	391	83	100	402	69	98	315	142
Shared Lane Traffic (%)												
Lane Group Flow (vph)	264	730	0	69	474	0	100	471	0	98	457	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

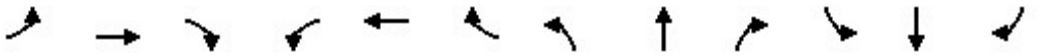
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0		3.0	6.0		3.0	6.0	
Minimum Split (s)	8.2	28.2		8.2	26.2		8.5	27.5		8.5	27.5	
Total Split (s)	28.0	58.0		21.0	51.0		22.0	38.0		23.0	39.0	
Total Split (%)	20.0%	41.4%		15.0%	36.4%		15.7%	27.1%		16.4%	27.9%	
Maximum Green (s)	22.8	52.8		15.8	45.8		16.5	32.5		17.5	33.5	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.6	1.6		1.6	1.6		1.9	1.9		1.9	1.9	
Lost Time Adjust (s)	0.0	-1.1		0.0	-1.1		0.0	-1.1		0.0	-1.1	
Total Lost Time (s)	5.2	4.1		5.2	4.1		5.5	4.4		5.5	4.4	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	0.5	1.0		0.5	1.0		0.5	1.0		0.5	1.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		16.0			14.0			15.0			15.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	82.4	83.5		67.4	68.5		22.3	23.4		21.1	22.2	
Actuated g/C Ratio	0.59	0.60		0.48	0.49		0.16	0.17		0.15	0.16	
v/c Ratio	0.42	0.36		0.23	0.28		0.48	0.81		0.57	0.81	
Control Delay	15.7	8.3		24.6	22.4		62.7	65.5		65.3	62.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	15.7	8.3		24.6	22.4		62.7	65.5		65.3	62.0	
LOS	B	A		C	C		E	E		E	E	
Approach Delay		10.3			22.7			65.0			62.6	
Approach LOS		B			C			E			E	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 84 (60%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 35.4 Intersection LOS: D
Intersection Capacity Utilization 68.5% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 4: 24th St & Commerce St



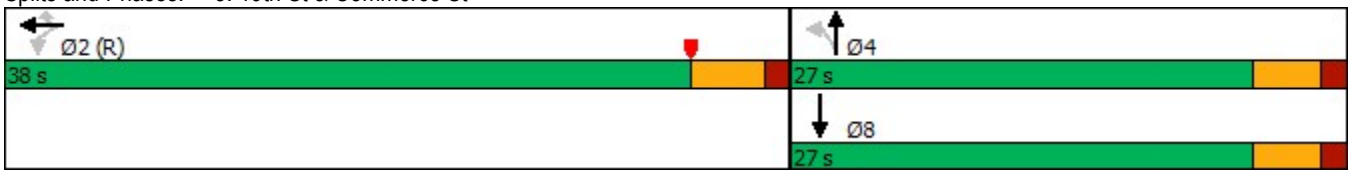


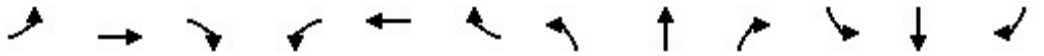
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	27	495	21	16	50	0	0	59	8
Future Volume (vph)	0	0	0	27	495	21	16	50	0	0	59	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		230	150		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00	0.93						
Frt						0.850					0.983	
Flt Protected					0.997		0.950					
Satd. Flow (prot)	0	0	0	0	3529	1583	1770	1863	0	0	1831	0
Flt Permitted					0.997		0.704					
Satd. Flow (perm)	0	0	0	0	3519	1468	1311	1863	0	0	1831	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						27					10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		383			1482			392			323	
Travel Time (s)		8.7			33.7			8.9			7.3	
Confl. Peds. (#/hr)				30		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	33	597	25	19	60	0	0	71	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	630	25	19	60	0	0	81	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			1.0	
Minimum Split (s)				22.8	22.8	22.8	20.6	20.6			20.6	
Total Split (s)				38.0	38.0	38.0	27.0	27.0			27.0	
Total Split (%)				58.5%	58.5%	58.5%	41.5%	41.5%			41.5%	
Maximum Green (s)				33.2	33.2	33.2	22.4	22.4			22.4	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.8	-0.8	-0.6	-0.6			-0.6	
Total Lost Time (s)					4.0	4.0	4.0	4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Min	C-Min	C-Min	None	None			None	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)				11.0	11.0	11.0	9.0	9.0			9.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)					52.5	52.5	7.5	7.5			7.0	
Actuated g/C Ratio					0.81	0.81	0.12	0.12			0.11	
v/c Ratio					0.22	0.02	0.13	0.28			0.40	
Control Delay					2.3	1.0	27.1	29.4			29.5	
Queue Delay					0.0	0.0	0.0	0.0			0.0	
Total Delay					2.3	1.0	27.1	29.4			29.5	
LOS					A	A	C	C			C	
Approach Delay					2.3			28.8			29.5	
Approach LOS					A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 20 (31%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 7.6		Intersection LOS: A	
Intersection Capacity Utilization 30.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: 19th St & Commerce St



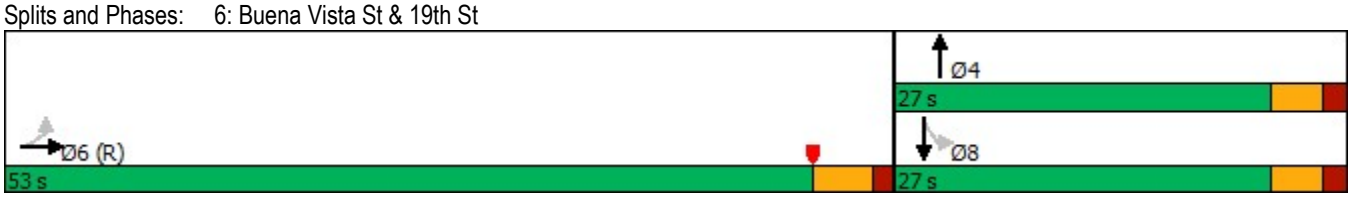


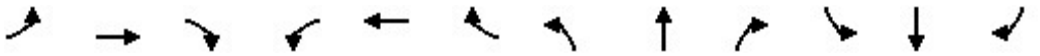
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	540	24	0	0	0	0	38	43	23	39	0
Future Volume (vph)	5	540	24	0	0	0	0	38	43	23	39	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	150		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00										
Frt		0.994						0.928				
Flt Protected											0.982	
Satd. Flow (prot)	0	3518	0	0	0	0	0	1729	0	0	1829	0
Flt Permitted											0.888	
Satd. Flow (perm)	0	3517	0	0	0	0	0	1729	0	0	1654	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10						53				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		532			1269			389			392	
Travel Time (s)		12.1			28.8			8.8			8.9	
Confl. Peds. (#/hr)	30											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	6	669	30	0	0	0	0	47	53	29	48	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	705	0	0	0	0	0	100	0	0	77	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	0	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	0	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	14.9	14.9						10.7		10.9	10.9	
Total Split (s)	53.0	53.0						27.0		27.0	27.0	
Total Split (%)	66.3%	66.3%						33.8%		33.8%	33.8%	
Maximum Green (s)	48.1	48.1						22.3		22.3	22.3	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3						1.5		1.5	1.5	
Lost Time Adjust (s)		-0.8						-0.6			-0.6	
Total Lost Time (s)		4.1						4.1			4.1	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Act Effct Green (s)		48.9						22.9			22.9	
Actuated g/C Ratio		0.61						0.29			0.29	
v/c Ratio		0.33						0.19			0.16	
Control Delay		7.9						12.6			22.6	
Queue Delay		0.0						0.0			0.0	
Total Delay		7.9						12.6			22.6	
LOS		A						B			C	
Approach Delay		7.9						12.6			22.6	
Approach LOS		A						B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay: 9.8		Intersection LOS: A	
Intersection Capacity Utilization 35.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: Buena Vista St & 19th St





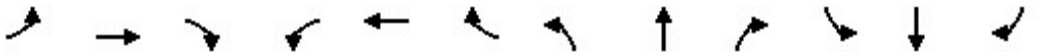
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	27	500	24	21	69	0	0	97	24
Future Volume (vph)	0	0	0	27	500	24	21	69	0	0	97	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		220	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.973	
Flt Protected					0.997			0.989				
Satd. Flow (prot)	0	0	0	0	3529	1583	0	1842	0	0	1812	0
Flt Permitted					0.997			0.811				
Satd. Flow (perm)	0	0	0	0	3529	1583	0	1511	0	0	1812	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						29					18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1482			1455			390			326	
Travel Time (s)		33.7			33.1			8.9			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	33	603	29	25	83	0	0	117	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	636	29	0	108	0	0	146	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				20.7	20.7	20.7	26.7	26.7			26.7	
Total Split (s)				45.0	45.0	45.0	35.0	35.0			35.0	
Total Split (%)				56.3%	56.3%	56.3%	43.8%	43.8%			43.8%	
Maximum Green (s)				40.3	40.3	40.3	30.3	30.3			30.3	
Yellow Time (s)				3.6	3.6	3.6	3.0	3.0			3.0	
All-Red Time (s)				1.1	1.1	1.1	1.7	1.7			1.7	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					3.9	3.9		4.1			4.1	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Min	C-Min	C-Min	None	None			None	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)				9.0	9.0	9.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)					61.9	61.9		10.1			10.1	
Actuated g/C Ratio					0.77	0.77		0.13			0.13	
v/c Ratio					0.23	0.02		0.57			0.60	
Control Delay					1.3	0.6		43.7			38.4	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					1.3	0.6		43.7			38.4	
LOS					A	A		D			D	
Approach Delay					1.2			43.7			38.4	
Approach LOS					A			D			D	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 72 (90%), Referenced to phase 2:WBTL, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 12.1	Intersection LOS: B
Intersection Capacity Utilization 39.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Hamilton Ave & Commerce St



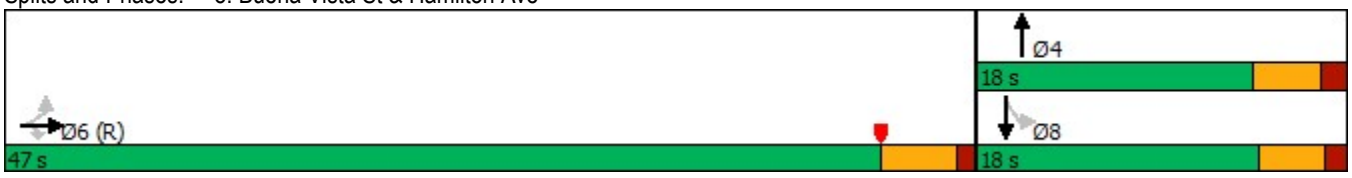


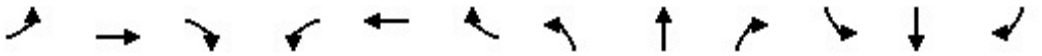
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	613	35	0	0	0	0	32	75	2	11	0
Future Volume (vph)	4	613	35	0	0	0	0	32	75	2	11	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850					0.906				
Flt Protected											0.994	
Satd. Flow (prot)	0	3539	1583	0	0	0	0	1688	0	0	1852	0
Flt Permitted											0.946	
Satd. Flow (perm)	0	3539	1583	0	0	0	0	1688	0	0	1762	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			43					93				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		216			1230			392			390	
Travel Time (s)		4.9			28.0			8.9			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	5	760	43	0	0	0	0	40	93	2	14	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	765	43	0	0	0	0	133	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	0	100	20					100		0	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	0	6	20					6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Detector Phase	6	6	6					4		8	8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	10.0	10.0	10.0					6.0		6.0	6.0	
Minimum Split (s)	14.6	14.6	14.6					10.6		10.4	10.4	
Total Split (s)	47.0	47.0	47.0					18.0		18.0	18.0	
Total Split (%)	72.3%	72.3%	72.3%					27.7%		27.7%	27.7%	
Maximum Green (s)	42.4	42.4	42.4					13.4		13.6	13.6	
Yellow Time (s)	3.6	3.6	3.6					3.2		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0					1.4		1.2	1.2	
Lost Time Adjust (s)		-0.6	-0.6					-0.6			-0.4	
Total Lost Time (s)		4.0	4.0					4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	C-Min	C-Min	C-Min					None		None	None	
Act Effct Green (s)		52.4	52.4					7.5			7.4	
Actuated g/C Ratio		0.81	0.81					0.12			0.11	
v/c Ratio		0.27	0.03					0.48			0.08	
Control Delay		2.5	0.9					16.7			25.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		2.5	0.9					16.7			25.7	
LOS		A	A					B			C	
Approach Delay		2.4						16.7			25.7	
Approach LOS		A						B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 64 (98%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay: 4.8		Intersection LOS: A	
Intersection Capacity Utilization 33.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: Buena Vista St & Hamilton Ave



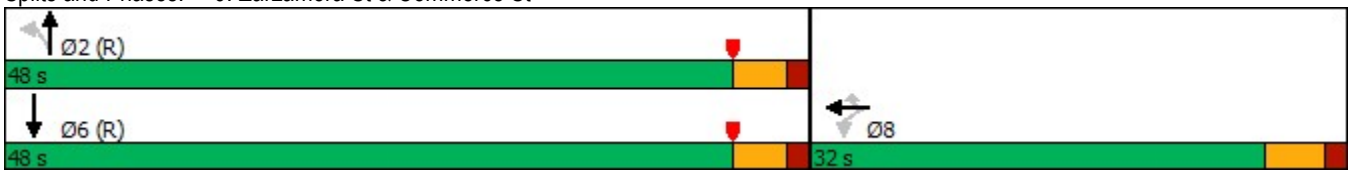


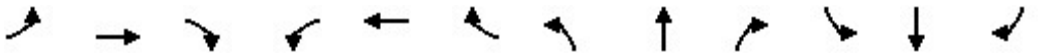
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	122	420	74	74	507	0	0	441	64
Future Volume (vph)	0	0	0	122	420	74	74	507	0	0	441	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor					0.99	0.95						
Frt						0.850					0.981	
Flt Protected					0.989			0.994				
Satd. Flow (prot)	0	0	0	0	3500	1583	0	3518	0	0	3472	0
Flt Permitted					0.989			0.800				
Satd. Flow (perm)	0	0	0	0	3469	1502	0	2831	0	0	3472	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						54					32	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1455			396			389			155	
Travel Time (s)		33.1			9.0			8.8			3.5	
Confl. Peds. (#/hr)				30		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	147	507	89	89	612	0	0	532	77
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	654	89	0	701	0	0	609	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2					
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				6.0	6.0	6.0	10.0	10.0			10.0	
Minimum Split (s)				23.0	23.0	23.0	21.7	21.7			20.7	
Total Split (s)				32.0	32.0	32.0	48.0	48.0			48.0	
Total Split (%)				40.0%	40.0%	40.0%	60.0%	60.0%			60.0%	
Maximum Green (s)				27.0	27.0	27.0	43.3	43.3			43.3	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.4	1.4	1.4	1.5	1.5			1.5	
Lost Time Adjust (s)					-0.8	-0.8		-0.8			-0.8	
Total Lost Time (s)					4.2	4.2		3.9			3.9	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0	2.0	1.0	1.0			1.0	
Recall Mode				None	None	None	C-Min	C-Min			C-Min	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)				11.0	11.0	11.0	10.0	10.0			9.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)					21.3	21.3		50.6			50.6	
Actuated g/C Ratio					0.27	0.27		0.63			0.63	
v/c Ratio					0.71	0.20		0.39			0.28	
Control Delay					20.2	5.4		8.1			7.2	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					20.2	5.4		8.1			7.2	
LOS					C	A		A			A	
Approach Delay					18.4			8.1			7.2	
Approach LOS					B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 75 (94%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 11.6		Intersection LOS: B	
Intersection Capacity Utilization 60.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 9: Zarzamora St & Commerce St





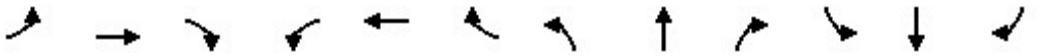
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	533	53	0	0	0	0	407	90	53	365	0
Future Volume (vph)	73	533	53	0	0	0	0	407	90	53	365	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00
Ped Bike Factor		1.00	0.96									
Frt			0.850					0.973				
Flt Protected		0.994									0.994	
Satd. Flow (prot)	0	3518	1583	0	0	0	0	3444	0	0	3518	0
Flt Permitted		0.994									0.815	
Satd. Flow (perm)	0	3508	1528	0	0	0	0	3444	0	0	2884	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			66					49				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		220			760			394			389	
Travel Time (s)		5.0			17.3			9.0			8.8	
Confl. Peds. (#/hr)	30		30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	90	660	66	0	0	0	0	504	112	66	452	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	750	66	0	0	0	0	616	0	0	518	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	0	100	20					100		0	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	0	6	20					6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4		4							6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4					2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0					10.0		10.0	10.0	
Minimum Split (s)	10.9	10.9	10.9					14.8		14.8	14.8	
Total Split (s)	35.0	35.0	35.0					45.0		45.0	45.0	
Total Split (%)	43.8%	43.8%	43.8%					56.3%		56.3%	56.3%	
Maximum Green (s)	30.1	30.1	30.1					40.2		40.2	40.2	
Yellow Time (s)	3.6	3.6	3.6					3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3	1.3					1.6		1.6	1.6	
Lost Time Adjust (s)		-0.4	-0.4					-0.6			-0.6	
Total Lost Time (s)		4.5	4.5					4.2			4.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	None	None	None					C-Min		C-Min	C-Min	
Act Effct Green (s)		21.9	21.9					49.4			49.4	
Actuated g/C Ratio		0.27	0.27					0.62			0.62	
v/c Ratio		0.78	0.14					0.29			0.29	
Control Delay		32.5	6.1					7.6			11.0	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		32.5	6.1					7.6			11.0	
LOS		C	A					A			B	
Approach Delay		30.4						7.6			11.0	
Approach LOS		C						A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 25 (31%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 18.1		Intersection LOS: B	
Intersection Capacity Utilization 59.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 10: Buena Vista St & Zarzamora St



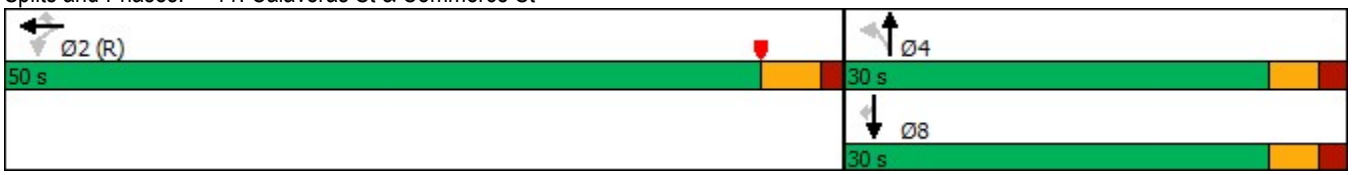


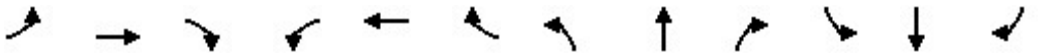
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	11	576	57	8	22	0	0	34	14
Future Volume (vph)	0	0	0	11	576	57	8	22	0	0	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		220	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected					0.999			0.987				
Satd. Flow (prot)	0	0	0	0	3536	1583	0	1839	0	0	1863	1583
Flt Permitted					0.999			0.894				
Satd. Flow (perm)	0	0	0	0	3536	1583	0	1665	0	0	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						69						27
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		351			709			390			185	
Travel Time (s)		8.0			16.1			8.9			4.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	13	695	69	10	27	0	0	41	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	708	69	0	37	0	0	41	17
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				0	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				0	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	Perm
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2		2	4					8
Detector Phase				2	2	2	4	4			8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	6.0
Minimum Split (s)				22.0	22.0	22.0	21.8	21.8			10.8	10.8
Total Split (s)				50.0	50.0	50.0	30.0	30.0			30.0	30.0
Total Split (%)				62.5%	62.5%	62.5%	37.5%	37.5%			37.5%	37.5%
Maximum Green (s)				45.0	45.0	45.0	25.2	25.2			25.2	25.2
Yellow Time (s)				3.6	3.6	3.6	3.0	3.0			3.0	3.0
All-Red Time (s)				1.4	1.4	1.4	1.8	1.8			1.8	1.8
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	0.0
Total Lost Time (s)					4.2	4.2		4.2			4.2	4.8
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	1.0
Recall Mode				C-Min	C-Min	C-Min	None	None			None	None
Walk Time (s)				7.0	7.0	7.0	7.0	7.0				
Flash Dont Walk (s)				10.0	10.0	10.0	10.0	10.0				
Pedestrian Calls (#/hr)				0	0	0	0	0				
Act Effct Green (s)					70.6	70.6		7.0			7.0	6.4
Actuated g/C Ratio					0.88	0.88		0.09			0.09	0.08
v/c Ratio					0.23	0.05		0.26			0.25	0.11
Control Delay					2.4	0.7		46.9			38.0	11.2
Queue Delay					0.0	0.0		0.0			0.0	0.0
Total Delay					2.4	0.7		46.9			38.0	11.2
LOS					A	A		D			D	B
Approach Delay					2.2			46.9			30.2	
Approach LOS					A			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 44 (55%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay: 6.0		Intersection LOS: A	
Intersection Capacity Utilization 39.0%		ICU Level of Service A	
Analysis Period (min) 15			

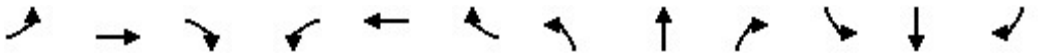
Splits and Phases: 11: Calaveras St & Commerce St





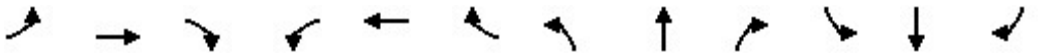
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	684	0	0	0	0	0	6	6	25	0	0
Future Volume (vph)	15	684	0	0	0	0	0	6	6	25	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt								0.932				
Flt Protected		0.999									0.950	
Satd. Flow (prot)	0	3536	0	0	0	0	0	1736	0	0	1770	0
Flt Permitted		0.999									0.950	
Satd. Flow (perm)	0	3536	0	0	0	0	0	1736	0	0	1770	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		760			459			281			390	
Travel Time (s)		17.3			10.4			6.4			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	19	848	0	0	0	0	0	7	7	31	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	867	0	0	0	0	0	14	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.0%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	3	635	0	15	0	0	0	0	0
Future Volume (vph)	0	0	0	3	635	0	15	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected								0.950				
Satd. Flow (prot)	0	0	0	0	3539	0	0	1770	0	0	1863	0
Flt Permitted								0.950				
Satd. Flow (perm)	0	0	0	0	3539	0	0	1770	0	0	1863	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		709			1094			391			236	
Travel Time (s)		16.1			24.9			8.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	4	766	0	18	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	770	0	0	18	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.6%		ICU Level of Service A	
Analysis Period (min) 15			

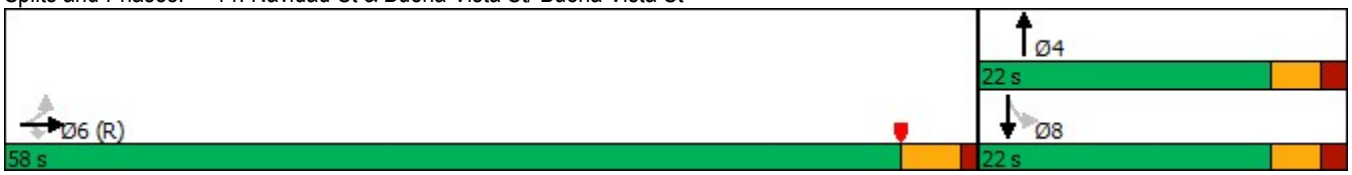


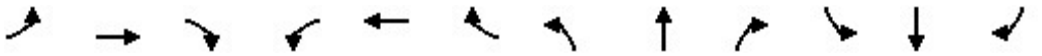
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	766	8	0	0	0	0	1	6	6	4	0
Future Volume (vph)	4	766	8	0	0	0	0	1	6	6	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850					0.882				
Flt Protected											0.972	
Satd. Flow (prot)	0	3539	1583	0	0	0	0	1643	0	0	1811	0
Flt Permitted											0.909	
Satd. Flow (perm)	0	3539	1583	0	0	0	0	1643	0	0	1693	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			23					7				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		237			1448			392			391	
Travel Time (s)		5.4			32.9			8.9			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	5	949	10	0	0	0	0	1	7	7	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	954	10	0	0	0	0	8	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	0	100	20					100		0	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	0	6	20					6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Detector Phase	6	6	6					4		8	8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	10.0	10.0	10.0					6.0		6.0	6.0	
Minimum Split (s)	18.7	18.7	18.7					20.7		20.7	20.7	
Total Split (s)	58.0	58.0	58.0					22.0		22.0	22.0	
Total Split (%)	72.5%	72.5%	72.5%					27.5%		27.5%	27.5%	
Maximum Green (s)	53.3	53.3	53.3					17.3		17.3	17.3	
Yellow Time (s)	3.6	3.6	3.6					3.0		3.0	3.0	
All-Red Time (s)	1.1	1.1	1.1					1.7		1.7	1.7	
Lost Time Adjust (s)		-0.6	-0.6					-0.5			-0.5	
Total Lost Time (s)		4.1	4.1					4.2			4.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	C-Max	C-Max	C-Max					Max		Max	Max	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0	7.0	
Flash Dont Walk (s)	7.0	7.0	7.0					9.0		9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0					0		0	0	
Act Effct Green (s)		53.9	53.9					17.8			17.8	
Actuated g/C Ratio		0.67	0.67					0.22			0.22	
v/c Ratio		0.40	0.01					0.02			0.03	
Control Delay		2.3	0.1					15.7			30.5	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		2.3	0.1					15.7			30.5	
LOS		A	A					B			C	
Approach Delay		2.3						15.7			30.5	
Approach LOS		A						B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 75 (94%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 2.7		Intersection LOS: A	
Intersection Capacity Utilization 37.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 14: Navidad St & Buena Vista St/ Buena Vista St



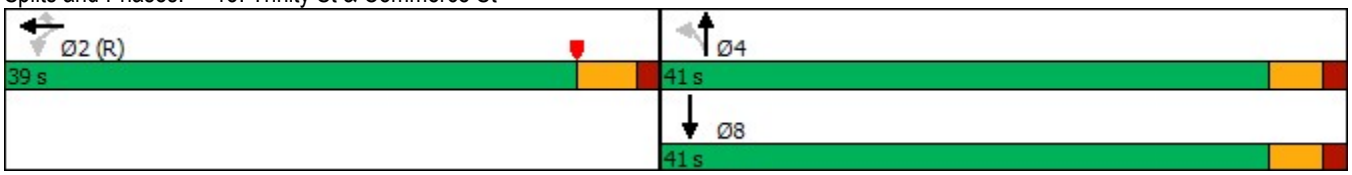


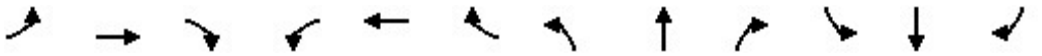
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	46	576	26	38	187	0	0	143	37
Future Volume (vph)	0	0	0	46	576	26	38	187	0	0	143	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		205	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.972	
Flt Protected					0.996			0.992				
Satd. Flow (prot)	0	0	0	0	3525	1583	0	1848	0	0	1811	0
Flt Permitted					0.996			0.923				
Satd. Flow (perm)	0	0	0	0	3525	1583	0	1719	0	0	1811	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						31					22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1095			394			321	
Travel Time (s)		8.0			24.9			9.0			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	56	695	31	46	226	0	0	173	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	751	31	0	272	0	0	218	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				23.0	23.0	23.0	22.8	22.8			10.8	
Total Split (s)				39.0	39.0	39.0	41.0	41.0			41.0	
Total Split (%)				48.8%	48.8%	48.8%	51.3%	51.3%			51.3%	
Maximum Green (s)				34.0	34.0	34.0	36.2	36.2			36.2	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.4	1.4	1.4	1.6	1.6			1.6	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					4.2	4.2		4.2			4.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0				
Flash Dont Walk (s)				11.0	11.0	11.0	11.0	11.0				
Pedestrian Calls (#/hr)				0	0	0	0	0				
Act Effct Green (s)					34.8	34.8		36.8			36.8	
Actuated g/C Ratio					0.44	0.44		0.46			0.46	
v/c Ratio					0.49	0.04		0.34			0.26	
Control Delay					10.2	1.6		12.9			12.8	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					10.2	1.6		12.9			12.8	
LOS					B	A		B			B	
Approach Delay					9.9			12.9			12.8	
Approach LOS					A			B			B	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 6 (8%), Referenced to phase 2:WBTL, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 11.0	Intersection LOS: B
Intersection Capacity Utilization 53.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Trinity St & Commerce St



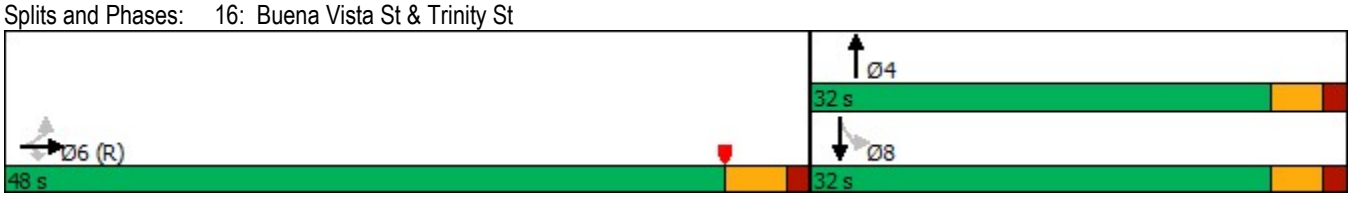


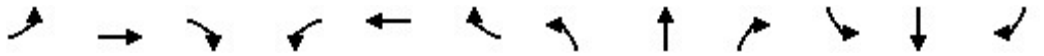
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	722	57	0	0	0	0	66	66	7	34	0
Future Volume (vph)	7	722	57	0	0	0	0	66	66	7	34	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		130	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95									
Frt			0.850					0.932				
Flt Protected											0.991	
Satd. Flow (prot)	0	3539	1583	0	0	0	0	1736	0	0	1846	0
Flt Permitted											0.863	
Satd. Flow (perm)	0	3539	1509	0	0	0	0	1736	0	0	1608	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			71					69				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1448			1114			389			394	
Travel Time (s)		32.9			25.3			8.8			9.0	
Confl. Peds. (#/hr)			30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	9	895	71	0	0	0	0	82	82	9	42	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	904	71	0	0	0	0	164	0	0	51	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	0	100	20					100		0	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	0	6	20					6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Detector Phase	6	6	6					4		8	8	
Switch Phase												
Minimum Initial (s)	10.2	10.2	10.2					6.1		6.1	6.1	
Minimum Split (s)	15.3	15.3	15.3					10.8		10.8	10.8	
Total Split (s)	48.0	48.0	48.0					32.0		32.0	32.0	
Total Split (%)	60.0%	60.0%	60.0%					40.0%		40.0%	40.0%	
Maximum Green (s)	42.9	42.9	42.9					27.3		27.3	27.3	
Yellow Time (s)	3.6	3.6	3.6					3.2		3.2	3.2	
All-Red Time (s)	1.5	1.5	1.5					1.5		1.5	1.5	
Lost Time Adjust (s)		-0.9	-0.9					-0.6			-0.6	
Total Lost Time (s)		4.2	4.2					4.1			4.1	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Act Effct Green (s)		62.3	62.3					9.4			9.4	
Actuated g/C Ratio		0.78	0.78					0.12			0.12	
v/c Ratio		0.33	0.06					0.62			0.27	
Control Delay		0.6	0.1					29.9			27.2	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		0.6	0.1					29.9			27.2	
LOS		A	A					C			C	
Approach Delay		0.6						29.9			27.2	
Approach LOS		A						C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 25 (31%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 5.8		Intersection LOS: A	
Intersection Capacity Utilization 38.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 16: Buena Vista St & Trinity St



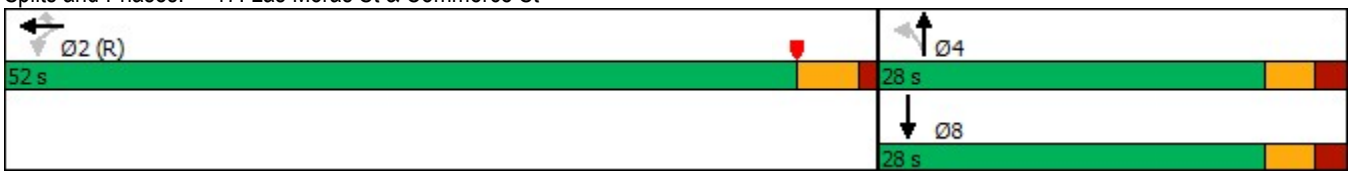


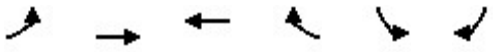
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	5	593	13	7	9	0	0	10	4
Future Volume (vph)	0	0	0	5	593	13	7	9	0	0	10	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		180	150		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.960	
Flt Protected								0.979				
Satd. Flow (prot)	0	0	0	0	3539	1583	0	1824	0	0	1788	0
Flt Permitted								0.934				
Satd. Flow (perm)	0	0	0	0	3539	1583	0	1740	0	0	1788	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						27					5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1095			1083			394			323	
Travel Time (s)		24.9			24.6			9.0			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	6	715	16	8	11	0	0	12	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	721	16	0	19	0	0	17	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				14.8	14.8	14.8	11.0	11.0			11.0	
Total Split (s)				52.0	52.0	52.0	28.0	28.0			28.0	
Total Split (%)				65.0%	65.0%	65.0%	35.0%	35.0%			35.0%	
Maximum Green (s)				47.2	47.2	47.2	23.0	23.0			23.0	
Yellow Time (s)				3.6	3.6	3.6	3.0	3.0			3.0	
All-Red Time (s)				1.2	1.2	1.2	2.0	2.0			2.0	
Lost Time Adjust (s)					-0.6	-0.6		-0.6			-0.6	
Total Lost Time (s)					4.2	4.2		4.4			4.4	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Act Effct Green (s)					47.8	47.8		23.6			23.6	
Actuated g/C Ratio					0.60	0.60		0.30			0.30	
v/c Ratio					0.34	0.02		0.04			0.03	
Control Delay					8.7	1.8		24.8			17.1	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					8.7	1.8		24.8			17.1	
LOS					A	A		C			B	
Approach Delay					8.5			24.8			17.1	
Approach LOS					A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 67 (84%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 9.1		Intersection LOS: A	
Intersection Capacity Utilization 33.0%		ICU Level of Service A	
Analysis Period (min) 15			

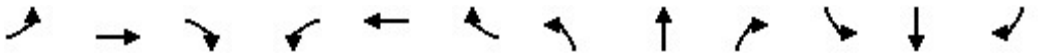
Splits and Phases: 17: Las Moras St & Commerce St





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	780	0	0	19	0
Future Volume (vph)	7	780	0	0	19	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1114	1066		394	
Travel Time (s)		25.3	24.2		9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	9	967	0	0	24	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	976	0	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.8%		ICU Level of Service A	
Analysis Period (min) 15			



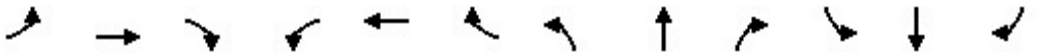
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	93	514	50	37	401	0	0	313	100
Future Volume (vph)	0	0	0	93	514	50	37	401	0	0	313	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor					0.99	0.95						
Frt						0.850					0.964	
Flt Protected					0.992			0.996				
Satd. Flow (prot)	0	0	0	0	3511	1583	0	3525	0	0	3412	0
Flt Permitted					0.992			0.882				
Satd. Flow (perm)	0	0	0	0	3474	1511	0	3122	0	0	3412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						60					79	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			377			390			320	
Travel Time (s)		24.6			8.6			8.9			7.3	
Confl. Peds. (#/hr)				60		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	112	620	60	45	484	0	0	378	121
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	732	60	0	529	0	0	499	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				25.0	25.0	25.0	20.6	20.6			20.6	
Total Split (s)				35.0	35.0	35.0	30.0	30.0			30.0	
Total Split (%)				53.8%	53.8%	53.8%	46.2%	46.2%			46.2%	
Maximum Green (s)				30.2	30.2	30.2	25.4	25.4			25.4	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)				10.0	10.0	10.0	9.0	9.0			9.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)					31.0	31.0		26.0			26.0	
Actuated g/C Ratio					0.48	0.48		0.40			0.40	
v/c Ratio					0.44	0.08		0.42			0.35	
Control Delay					12.3	3.3		13.8			12.2	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					12.3	3.3		13.8			12.2	
LOS					B	A		B			B	
Approach Delay					11.6			13.8			12.2	
Approach LOS					B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 63 (97%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay: 12.4		Intersection LOS: B	
Intersection Capacity Utilization 55.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 19: Colorado St & Commerce St



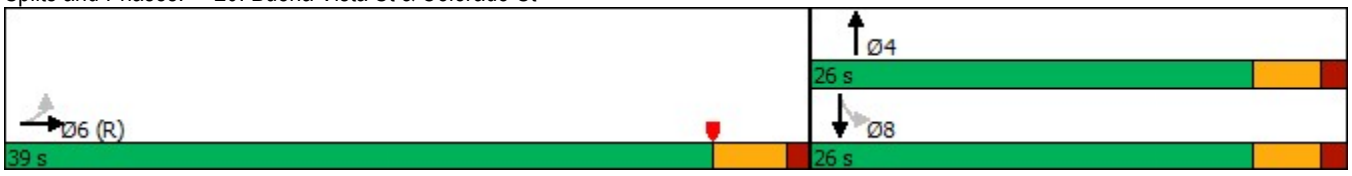


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	643	10	0	0	0	0	192	52	42	152	0
Future Volume (vph)	160	643	10	0	0	0	0	192	52	42	152	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00
Ped Bike Factor		0.99										
Frt		0.998						0.968				
Flt Protected		0.990									0.989	
Satd. Flow (prot)	0	5022	0	0	0	0	0	3426	0	0	3500	0
Flt Permitted		0.990									0.839	
Satd. Flow (perm)	0	4958	0	0	0	0	0	3426	0	0	2969	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4						56				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1066			378			360			390	
Travel Time (s)		24.2			8.6			8.2			8.9	
Confl. Peds. (#/hr)	60		30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	198	797	12	0	0	0	0	238	64	52	188	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1007	0	0	0	0	0	302	0	0	240	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	0	100						100		0	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	0	6						6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	25.0	25.0						20.6		20.6	20.6	
Total Split (s)	39.0	39.0						26.0		26.0	26.0	
Total Split (%)	60.0%	60.0%						40.0%		40.0%	40.0%	
Maximum Green (s)	34.2	34.2						21.4		21.4	21.4	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2						1.4		1.4	1.4	
Lost Time Adjust (s)		-0.8						-0.6			-0.6	
Total Lost Time (s)		4.0						4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0						9.0		9.0	9.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		35.0						22.0			22.0	
Actuated g/C Ratio		0.54						0.34			0.34	
v/c Ratio		0.38						0.25			0.24	
Control Delay		9.2						13.2			11.0	
Queue Delay		0.0						0.0			0.0	
Total Delay		9.2						13.2			11.0	
LOS		A						B			B	
Approach Delay		9.2						13.2			11.0	
Approach LOS		A						B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 10.2		Intersection LOS: B	
Intersection Capacity Utilization 42.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 20: Buena Vista St & Colorado St

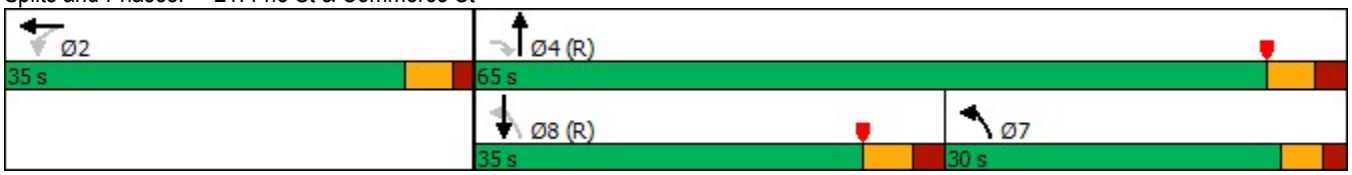


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	23	20	476	32	252	728	0	0	158	150
Future Volume (vph)	0	0	23	20	476	32	252	728	0	0	158	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.865		0.991						0.927	
Flt Protected					0.998		0.950					
Satd. Flow (prot)	0	0	1611	0	5029	0	1770	3539	0	0	3281	0
Flt Permitted					0.998		0.496					
Satd. Flow (perm)	0	0	1611	0	5029	0	924	3539	0	0	3281	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			990		10						181	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1809			501			387			300	
Travel Time (s)		41.1			11.4			8.8			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	28	24	574	39	304	878	0	0	191	181
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	28	0	637	0	304	878	0	0	372	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors			1	1	2		1	2			2	
Detector Template			Right	Left	Thru		Left	Thru			Thru	
Leading Detector (ft)			20	20	100		20	100			100	
Trailing Detector (ft)			0	0	0		0	0			0	
Detector 1 Position(ft)			0	0	0		0	0			0	
Detector 1 Size(ft)			20	20	6		20	6			6	
Detector 1 Type			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)			0.0	0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)			0.0	0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)			0.0	0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type			Perm	Perm	NA		D.P+P	NA			NA	
Protected Phases					2		7	4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	2			8					
Detector Phase			4	2	2		7	4			8	
Switch Phase												
Minimum Initial (s)			9.1	10.0	10.0		3.0	9.1			9.1	
Minimum Split (s)			15.2	15.5	15.5		8.2	15.2			15.2	
Total Split (s)			65.0	35.0	35.0		30.0	65.0			35.0	
Total Split (%)			65.0%	35.0%	35.0%		30.0%	65.0%			35.0%	
Maximum Green (s)			58.9	29.7	29.7		25.0	58.9			28.9	
Yellow Time (s)			3.6	3.6	3.6		3.0	3.6			3.6	
All-Red Time (s)			2.5	1.7	1.7		2.0	2.5			2.5	
Lost Time Adjust (s)			0.0		-1.3		-1.0	-2.1			-2.1	
Total Lost Time (s)			6.1		4.0		4.0	4.0			4.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)			1.0	1.0	1.0		1.0	1.0			1.0	
Recall Mode			C-Max	Min	Min		None	C-Max			C-Max	
Act Effct Green (s)			72.3		17.6		70.4	74.4			44.4	
Actuated g/C Ratio			0.72		0.18		0.70	0.74			0.44	
v/c Ratio			0.02		0.71		0.35	0.33			0.24	
Control Delay			0.0		42.0		9.8	6.1			9.5	
Queue Delay			0.0		0.0		0.0	0.5			0.0	
Total Delay			0.0		42.0		9.8	6.7			9.5	
LOS			A		D		A	A			A	
Approach Delay					42.0			7.5			9.5	
Approach LOS					D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 15 (15%), Referenced to phase 4:NBT and 8:NBSB, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 17.6		Intersection LOS: B	
Intersection Capacity Utilization 47.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 21: Frio St & Commerce St



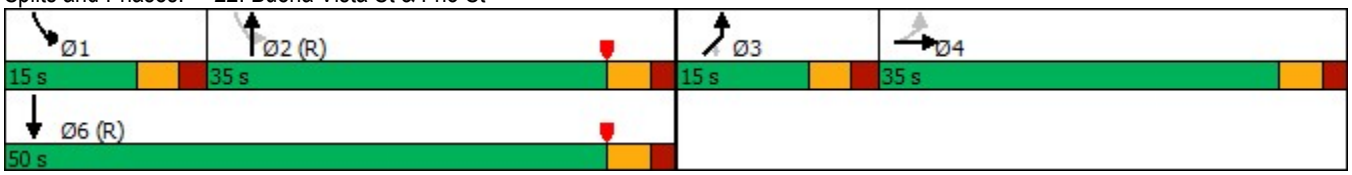


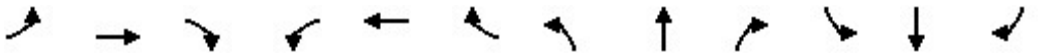
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	SBR	NEL	NER	NER2
Lane Configurations											
Traffic Volume (vph)	115	387	93	709	48	28	187	53	14	6	5
Future Volume (vph)	115	387	93	709	48	28	187	53	14	6	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		0	100		0	0	0	
Storage Lanes	0		0		0	1		0	1	1	
Taper Length (ft)	25					25			25		
Lane Util. Factor	0.91	0.91	0.91	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.977		0.990			0.967		0.950		0.850
Flt Protected		0.990				0.950			0.968		
Satd. Flow (prot)	0	4919	0	3504	0	1770	3422	0	1713	0	1504
Flt Permitted		0.990				0.210			0.968		
Satd. Flow (perm)	0	4919	0	3504	0	391	3422	0	1713	0	1504
Right Turn on Red					Yes						Yes
Satd. Flow (RTOR)				7					137		137
Link Speed (mph)		30		30			30		30		
Link Distance (ft)		1797		398			387		431		
Travel Time (s)		40.8		9.0			8.8		9.8		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	150	505	121	925	63	37	244	69	18	8	7
Shared Lane Traffic (%)											17%
Lane Group Flow (vph)	0	776	0	988	0	37	313	0	27	0	6
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Right	Right
Median Width(ft)		0		12			12		12		
Link Offset(ft)		0		0			0		0		
Crosswalk Width(ft)		16		16			16		16		
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9		9	15		9	15	9	9
Number of Detectors	1	2		2		1	2		1		1
Detector Template	Left	Thru		Thru		Left	Thru		Left		Right
Leading Detector (ft)	20	100		100		20	100		20		20
Trailing Detector (ft)	0	0		0		0	0		0		0
Detector 1 Position(ft)	0	0		0		0	0		0		0
Detector 1 Size(ft)	20	6		6		20	6		20		20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)	0.0	0.0		0.0		0.0	0.0		0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0		0.0	0.0		0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0		0.0	0.0		0.0		0.0
Detector 2 Position(ft)		94		94			94				
Detector 2 Size(ft)		6		6			6				
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)		0.0		0.0			0.0				
Turn Type	Perm	NA		NA		D.P+P	NA		Prot		Perm
Protected Phases		4		2		1	6		3		

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	SBR	NEL	NER	NER2
Permitted Phases	4					2					3
Detector Phase	4	4		2		1	6		3		3
Switch Phase											
Minimum Initial (s)	14.7	14.7		9.1		3.0	9.1		2.4		2.4
Minimum Split (s)	28.2	28.2		27.2		8.2	28.2		8.6		8.6
Total Split (s)	35.0	35.0		35.0		15.0	50.0		15.0		15.0
Total Split (%)	35.0%	35.0%		35.0%		15.0%	50.0%		15.0%		15.0%
Maximum Green (s)	29.8	29.8		29.8		9.8	44.8		9.8		9.8
Yellow Time (s)	3.2	3.2		3.2		3.2	3.2		3.2		3.2
All-Red Time (s)	2.0	2.0		2.0		2.0	2.0		2.0		2.0
Lost Time Adjust (s)		-1.3		-2.1		-1.0	-2.1		-1.0		-1.0
Total Lost Time (s)		3.9		3.1		4.2	3.1		4.2		4.2
Lead/Lag	Lag	Lag		Lag		Lead			Lead		Lead
Lead-Lag Optimize?	Yes	Yes		Yes		Yes			Yes		Yes
Vehicle Extension (s)	2.0	2.0		2.0		1.0	2.0		0.2		0.2
Recall Mode	None	None		C-Min		None	C-Min		None		None
Walk Time (s)	7.0	7.0		7.0			7.0				
Flash Dont Walk (s)	16.0	16.0		15.0			16.0				
Pedestrian Calls (#/hr)	0	0		0			0				
Act Effct Green (s)		22.6		59.6		62.0	65.6		3.7		3.7
Actuated g/C Ratio		0.23		0.60		0.62	0.66		0.04		0.04
v/c Ratio		0.70		0.47		0.12	0.14		0.14		0.03
Control Delay		38.8		14.7		8.4	6.8		1.5		0.3
Queue Delay		0.0		0.0		0.0	0.0		0.0		0.0
Total Delay		38.8		14.7		8.4	6.8		1.5		0.3
LOS		D		B		A	A		A		A
Approach Delay		38.8		14.7			6.9		1.3		
Approach LOS		D		B			A		A		

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 21.9		Intersection LOS: C	
Intersection Capacity Utilization 55.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 22: Buena Vista St & Frio St



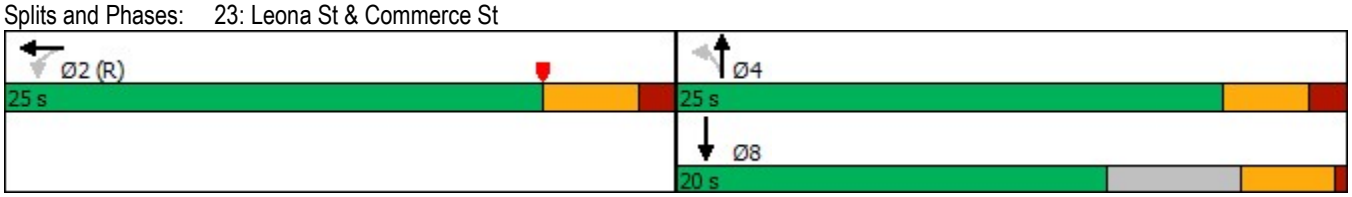


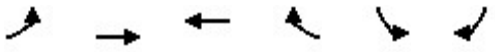
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	593	14	7	20	0	0	1	8
Future Volume (vph)	0	0	0	8	593	14	7	20	0	0	1	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.997						0.877	
Flt Protected					0.999			0.988				
Satd. Flow (prot)	0	0	0	0	5065	0	0	1840	0	0	1634	0
Flt Permitted					0.999			0.922				
Satd. Flow (perm)	0	0	0	0	5047	0	0	1717	0	0	1634	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					8						10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		501			236			383			320	
Travel Time (s)		11.4			5.4			8.7			7.3	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	10	715	17	8	24	0	0	1	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	742	0	0	32	0	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0		6.0	6.0			5.0	
Minimum Split (s)				24.0	24.0		23.7	23.7			10.7	
Total Split (s)				25.0	25.0		25.0	25.0			20.0	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			40.0%	
Maximum Green (s)				20.0	20.0		20.3	20.3			16.0	
Yellow Time (s)				3.6	3.6		3.2	3.2			3.5	
All-Red Time (s)				1.4	1.4		1.5	1.5			0.5	
Lost Time Adjust (s)					-1.0			-0.7			-0.7	
Total Lost Time (s)					4.0			4.0			3.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0			3.0	
Recall Mode				C-Min	C-Min		Min	Min			Min	
Walk Time (s)				7.0	7.0		7.0	7.0				
Flash Dont Walk (s)				12.0	12.0		12.0	12.0				
Pedestrian Calls (#/hr)				0	0		0	0				
Act Effct Green (s)					35.3			6.7			7.4	
Actuated g/C Ratio					0.71			0.13			0.15	
v/c Ratio					0.21			0.14			0.04	
Control Delay					2.2			19.6			12.2	
Queue Delay					0.0			0.0			0.0	
Total Delay					2.2			19.6			12.2	
LOS					A			B			B	
Approach Delay					2.2			19.6			12.2	
Approach LOS					A			B			B	

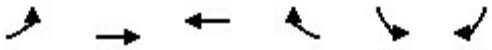
Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 45 (90%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.21			
Intersection Signal Delay: 3.1		Intersection LOS: A	
Intersection Capacity Utilization 27.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 23: Leona St & Commerce St





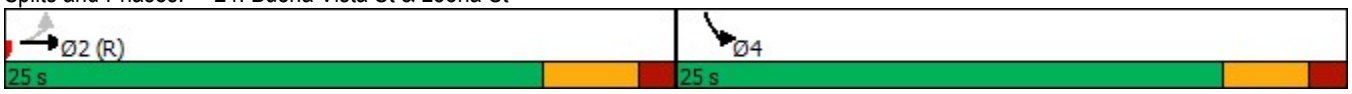
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	876	0	0	4	0
Future Volume (vph)	7	876	0	0	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						
Link Speed (mph)		30	30		30	
Link Distance (ft)		296	192		383	
Travel Time (s)		6.7	4.4		8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	9	1143	0	0	5	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1152	0	0	5	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2			1	
Detector Template	Left	Thru			Left	
Leading Detector (ft)	20	100			20	
Trailing Detector (ft)	0	0			0	
Detector 1 Position(ft)	0	0			0	
Detector 1 Size(ft)	20	6			20	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	
Detector 2 Position(ft)		94				
Detector 2 Size(ft)		6				
Detector 2 Type		Cl+Ex				
Detector 2 Channel						
Detector 2 Extend (s)		0.0				
Turn Type	Perm	NA			Prot	
Protected Phases		2			4	
Permitted Phases	2					
Detector Phase	2	2			4	
Switch Phase						

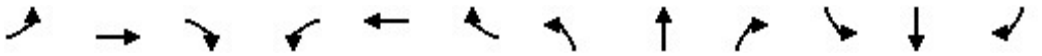


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)	10.0	10.0			6.0	
Minimum Split (s)	25.0	25.0			24.7	
Total Split (s)	25.0	25.0			25.0	
Total Split (%)	50.0%	50.0%			50.0%	
Maximum Green (s)	20.0	20.0			20.3	
Yellow Time (s)	3.6	3.6			3.2	
All-Red Time (s)	1.4	1.4			1.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		5.0			4.7	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.0			1.0	
Recall Mode	C-Min	C-Min			None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			13.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effct Green (s)		46.9			6.0	
Actuated g/C Ratio		0.94			0.12	
v/c Ratio		0.24			0.02	
Control Delay		0.9			19.8	
Queue Delay		0.0			0.0	
Total Delay		0.9			19.8	
LOS		A			B	
Approach Delay		0.9			19.8	
Approach LOS		A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 20 (40%), Referenced to phase 2:EBTL and 6:, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.24			
Intersection Signal Delay: 1.0		Intersection LOS: A	
Intersection Capacity Utilization 33.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Buena Vista St & Leona St



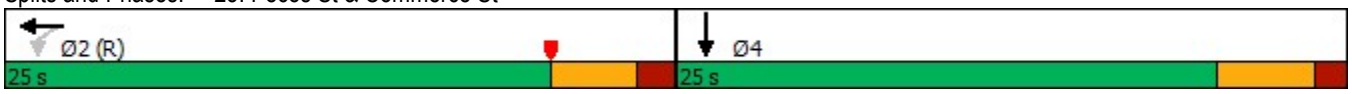


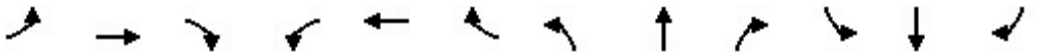
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	93	306	0	0	0	0	0	720	251
Future Volume (vph)	0	0	0	93	306	0	0	0	0	0	720	251
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Frt											0.961	
Flt Protected					0.988							
Satd. Flow (prot)	0	0	0	0	5024	0	0	0	0	0	4887	0
Flt Permitted					0.988							
Satd. Flow (perm)	0	0	0	0	5024	0	0	0	0	0	4887	0
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)											219	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		155			387			408			325	
Travel Time (s)		3.5			8.8			9.3			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	112	369	0	0	0	0	0	869	303
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	481	0	0	0	0	0	1172	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	
Detector Template				Left	Thru						Thru	
Leading Detector (ft)				20	100						100	
Trailing Detector (ft)				0	0						0	
Detector 1 Position(ft)				0	0						0	
Detector 1 Size(ft)				20	6						6	
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	
Detector 1 Queue (s)				0.0	0.0						0.0	
Detector 1 Delay (s)				0.0	0.0						0.0	
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	
Protected Phases					2						4	
Permitted Phases				2								
Detector Phase				2	2						4	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)				10.0	10.0						10.0	
Minimum Split (s)				24.7	24.7						23.9	
Total Split (s)				25.0	25.0						25.0	
Total Split (%)				50.0%	50.0%						50.0%	
Maximum Green (s)				20.3	20.3						20.1	
Yellow Time (s)				3.2	3.2						3.6	
All-Red Time (s)				1.5	1.5						1.3	
Lost Time Adjust (s)					-0.7						-1.1	
Total Lost Time (s)					4.0						3.8	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0						1.0	
Recall Mode				C-Min	C-Min						Min	
Walk Time (s)				7.0	7.0						7.0	
Flash Dont Walk (s)				13.0	13.0						12.0	
Pedestrian Calls (#/hr)				0	0						0	
Act Effct Green (s)					25.8						16.4	
Actuated g/C Ratio					0.52						0.33	
v/c Ratio					0.19						0.67	
Control Delay					7.5						13.1	
Queue Delay					0.0						0.0	
Total Delay					7.5						13.1	
LOS					A						B	
Approach Delay					7.5						13.1	
Approach LOS					A						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 40 (80%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 11.5		Intersection LOS: B	
Intersection Capacity Utilization 37.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 25: Pecos St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	634	246	0	0	0	0	0	0	210	468	0
Future Volume (vph)	0	634	246	0	0	0	0	0	0	210	468	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	1.00
Frt		0.958										
Flt Protected											0.985	
Satd. Flow (prot)	0	4872	0	0	0	0	0	0	0	0	6312	0
Flt Permitted											0.985	
Satd. Flow (perm)	0	4872	0	0	0	0	0	0	0	0	6312	0
Right Turn on Red			Yes			Yes			Yes	No		Yes
Satd. Flow (RTOR)		162										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		233			388			389			408	
Travel Time (s)		5.3			8.8			8.8			9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	0	827	321	0	0	0	0	0	0	274	610	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1148	0	0	0	0	0	0	0	0	884	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2								1	2	
Detector Template		Thru								Left	Thru	
Leading Detector (ft)		100								0	100	
Trailing Detector (ft)		0								0	0	
Detector 1 Position(ft)		0								0	0	
Detector 1 Size(ft)		6								0	6	
Detector 1 Type		Cl+Ex								Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0								0.0	0.0	
Detector 1 Queue (s)		0.0								0.0	0.0	
Detector 1 Delay (s)		0.0								0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA								Perm	NA	
Protected Phases		4									2	
Permitted Phases										2		
Detector Phase		4								2	2	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)		6.0								20.0	20.0	
Minimum Split (s)		24.7								25.0	25.0	
Total Split (s)		25.0								25.0	25.0	
Total Split (%)		50.0%								50.0%	50.0%	
Maximum Green (s)		20.3								20.0	20.0	
Yellow Time (s)		3.2								3.6	3.6	
All-Red Time (s)		1.5								1.4	1.4	
Lost Time Adjust (s)		-0.7									-1.0	
Total Lost Time (s)		4.0									4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0								4.0	4.0	
Recall Mode		C-Max								Min	Min	
Walk Time (s)		7.0								7.0	7.0	
Flash Dont Walk (s)		13.0								13.0	13.0	
Pedestrian Calls (#/hr)		0								0	0	
Act Effct Green (s)		21.0									21.0	
Actuated g/C Ratio		0.42									0.42	
v/c Ratio		0.54									0.33	
Control Delay		10.9									18.3	
Queue Delay		0.0									0.0	
Total Delay		10.9									18.3	
LOS		B									B	
Approach Delay		10.9									18.3	
Approach LOS		B									B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 20 (40%), Referenced to phase 4:EBT, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 14.1		Intersection LOS: B	
Intersection Capacity Utilization 44.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 26: Buena Vista St & Pecos St



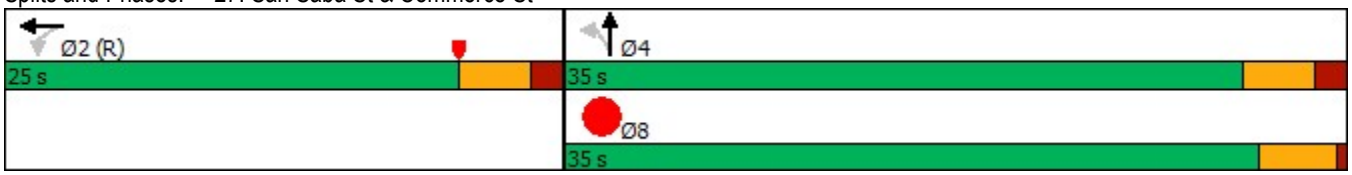
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	388	209	11	89	0	0	0	0
Future Volume (vph)	0	0	0	0	388	209	11	89	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00
Frt					0.947							
Flt Protected								0.995				
Satd. Flow (prot)	0	0	0	0	4816	0	0	3522	0	0	0	0
Flt Permitted								0.995				
Satd. Flow (perm)	0	0	0	0	4816	0	0	3522	0	0	0	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		387			563			166			325	
Travel Time (s)		8.8			12.8			3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	0	468	252	13	107	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	720	0	0	120	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2				
Detector Template					Thru		Left	Thru				
Leading Detector (ft)				0	100		0	100				
Trailing Detector (ft)				0	0		0	0				
Detector 1 Position(ft)				0	0		0	0				
Detector 1 Size(ft)				0	6		0	6				
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0				
Detector 1 Queue (s)				0.0	0.0		0.0	0.0				
Detector 1 Delay (s)				0.0	0.0		0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases				2			4					
Detector Phase				2	2		4	4				
Switch Phase												

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Growth Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	8
Permitted Phases	
Detector Phase	
Switch Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)				10.0	10.0		5.0	5.0				
Minimum Split (s)				14.7	14.7		9.7	9.7				
Total Split (s)				25.0	25.0		35.0	35.0				
Total Split (%)				41.7%	41.7%		58.3%	58.3%				
Maximum Green (s)				20.3	20.3		30.3	30.3				
Yellow Time (s)				3.2	3.2		3.2	3.2				
All-Red Time (s)				1.5	1.5		1.5	1.5				
Lost Time Adjust (s)					-2.0			-1.7				
Total Lost Time (s)					2.7			3.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0				
Recall Mode				C-Max	C-Max		Max	Max				
Walk Time (s)				7.0	7.0		7.0	7.0				
Flash Dont Walk (s)				12.0	12.0		12.0	12.0				
Pedestrian Calls (#/hr)				0	0		0	0				
Act Effct Green (s)					22.3			32.0				
Actuated g/C Ratio					0.37			0.53				
v/c Ratio					0.40			0.06				
Control Delay					14.8			6.9				
Queue Delay					0.0			0.0				
Total Delay					14.8			6.9				
LOS					B			A				
Approach Delay					14.8			6.9				
Approach LOS					B			A				

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 13.7		Intersection LOS: B	
Intersection Capacity Utilization 24.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 27: San Saba St & Commerce St



Lane Group	Ø8
Minimum Initial (s)	5.0
Minimum Split (s)	9.7
Total Split (s)	35.0
Total Split (%)	58%
Maximum Green (s)	31.0
Yellow Time (s)	3.5
All-Red Time (s)	0.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	124	699	4	0	0	0	0	4	3	0	0	0
Future Volume (vph)	124	699	4	0	0	0	0	4	3	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	0		0
Storage Lanes	1		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.44									
Frt			0.850					0.940				
Flt Protected	0.950											
Satd. Flow (prot)	1770	5085	1583	0	0	0	0	1751	0	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1770	5085	692	0	0	0	0	1751	0	0	0	0
Right Turn on Red	No		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			25					4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		388			565			393			243	
Travel Time (s)		8.8			12.8			8.9			5.5	
Confl. Peds. (#/hr)			200									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	162	912	5	0	0	0	0	5	4	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	162	912	5	0	0	0	0	9	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2				
Detector Template	Left	Thru	Right					Thru				
Leading Detector (ft)	20	100	20					100				
Trailing Detector (ft)	0	0	0					0				
Detector 1 Position(ft)	0	0	0					0				
Detector 1 Size(ft)	20	6	20					6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0				
Detector 1 Queue (s)	0.0	0.0	0.0					0.0				
Detector 1 Delay (s)	0.0	0.0	0.0					0.0				
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0				

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Growth Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Split	NA	Perm					NA				
Protected Phases	2	2						4				
Permitted Phases			2									
Detector Phase	2	2	2					4				
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					4.9				
Minimum Split (s)	15.0	15.0	15.0					10.2				
Total Split (s)	60.0	60.0	60.0					40.0				
Total Split (%)	60.0%	60.0%	60.0%					40.0%				
Maximum Green (s)	55.4	55.4	55.4					34.7				
Yellow Time (s)	3.6	3.6	3.6					3.2				
All-Red Time (s)	1.0	1.0	1.0					2.1				
Lost Time Adjust (s)	-0.6	-0.6	-0.6					-0.6				
Total Lost Time (s)	4.0	4.0	4.0					4.7				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0					1.0				
Recall Mode	C-Min	C-Min	C-Min					None				
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	6.0	6.0	6.0					18.0				
Pedestrian Calls (#/hr)	0	0	0					0				
Act Effct Green (s)	85.8	85.8	85.8					5.5				
Actuated g/C Ratio	0.86	0.86	0.86					0.06				
v/c Ratio	0.11	0.21	0.01					0.09				
Control Delay	1.1	1.1	0.0					37.8				
Queue Delay	0.0	0.0	0.0					0.0				
Total Delay	1.1	1.1	0.0					37.8				
LOS	A	A	A					D				
Approach Delay		1.1						37.8				
Approach LOS		A						D				

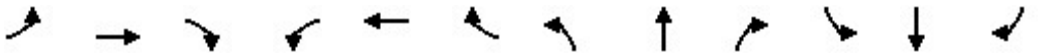
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 80 (80%), Referenced to phase 2:EBTL and 6:, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.21			
Intersection Signal Delay: 1.4		Intersection LOS: A	
Intersection Capacity Utilization 27.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 28: Dolorosa St & San Saba St



Lane Group	Ø8
Turn Type	
Protected Phases	8
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.6
Minimum Split (s)	10.2
Total Split (s)	40.0
Total Split (%)	40%
Maximum Green (s)	35.4
Yellow Time (s)	3.6
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	1.0
Recall Mode	Min
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

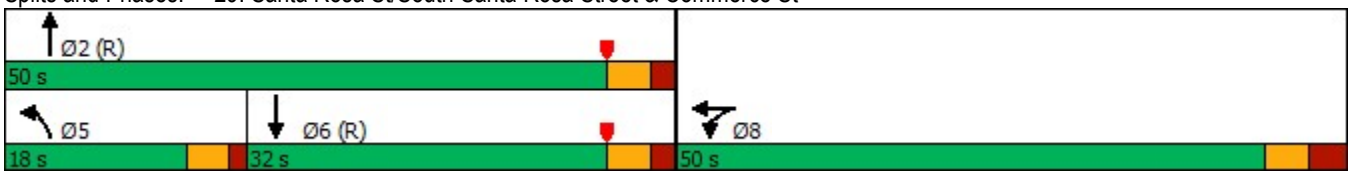


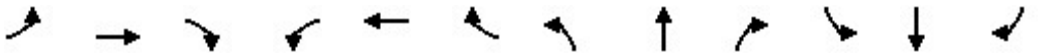
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	41	385	50	175	633	0	0	197	37
Future Volume (vph)	0	0	0	41	385	50	175	633	0	0	197	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		100	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Frt					0.984						0.976	
Flt Protected					0.996		0.950					
Satd. Flow (prot)	0	0	0	0	4984	0	1770	3539	0	0	3454	0
Flt Permitted					0.996		0.950					
Satd. Flow (perm)	0	0	0	0	4984	0	1770	3539	0	0	3454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					27						22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			184			374			398	
Travel Time (s)		12.8			4.2			8.5			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	49	465	60	211	764	0	0	238	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	574	0	211	764	0	0	283	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases												
Detector Phase				8	8		5	2			6	
Switch Phase												
Minimum Initial (s)				5.0	5.0		3.0	10.0			10.0	
Minimum Split (s)				43.2	43.2		7.4	28.2			29.2	
Total Split (s)				50.0	50.0		18.0	50.0			32.0	
Total Split (%)				50.0%	50.0%		18.0%	50.0%			32.0%	
Maximum Green (s)				43.8	43.8		13.6	44.8			26.8	
Yellow Time (s)				3.2	3.2		3.0	3.2			3.2	
All-Red Time (s)				3.0	3.0		1.4	2.0			2.0	
Lost Time Adjust (s)					-2.2		-0.4	-1.2			-1.2	
Total Lost Time (s)					4.0		4.0	4.0			4.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				Max	Max		Max	C-Max			C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				30.0	30.0			16.0			17.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					46.0		14.0	46.0			28.0	
Actuated g/C Ratio					0.46		0.14	0.46			0.28	
v/c Ratio					0.25		0.85	0.47			0.29	
Control Delay					15.9		74.2	30.7			26.9	
Queue Delay					0.0		0.0	1.0			0.0	
Total Delay					15.9		74.2	31.7			26.9	
LOS					B		E	C			C	
Approach Delay					15.9			40.9			26.9	
Approach LOS					B			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 30.9		Intersection LOS: C	
Intersection Capacity Utilization 49.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 29: Santa Rosa St/South Santa Rosa Street & Commerce St



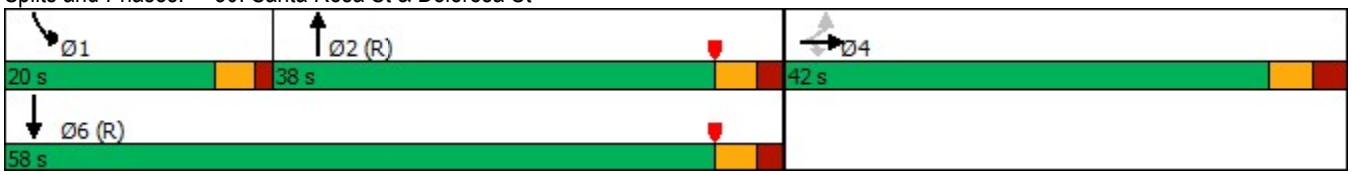


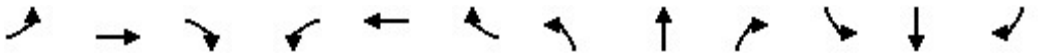
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	515	60	0	0	0	0	850	174	83	173	0
Future Volume (vph)	127	515	60	0	0	0	0	850	174	83	173	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	150		0
Storage Lanes	1		1	0		0	0		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.97	0.95	1.00
Frt			0.850					0.975				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	5085	1583	0	0	0	0	4958	0	3433	3539	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	5085	1583	0	0	0	0	4958	0	3433	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			78					47				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		565			395			416			374	
Travel Time (s)		12.8			9.0			9.5			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	166	672	78	0	0	0	0	1109	227	108	226	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	672	78	0	0	0	0	1336	0	108	226	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					100		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		4						2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4									
Detector Phase	4	4	4					2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0					10.0		3.0	10.0	
Minimum Split (s)	37.9	37.9	37.9					25.2		7.4	29.2	
Total Split (s)	42.0	42.0	42.0					38.0		20.0	58.0	
Total Split (%)	42.0%	42.0%	42.0%					38.0%		20.0%	58.0%	
Maximum Green (s)	36.1	36.1	36.1					32.8		15.6	52.8	
Yellow Time (s)	3.2	3.2	3.2					3.2		3.0	3.2	
All-Red Time (s)	2.7	2.7	2.7					2.0		1.4	2.0	
Lost Time Adjust (s)	-1.9	-1.9	-1.9					-1.2		-0.4	-1.2	
Total Lost Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	Max	Max	Max					C-Max		Max	C-Max	
Walk Time (s)	7.0	7.0	7.0					7.0			7.0	
Flash Dont Walk (s)	25.0	25.0	25.0					13.0			17.0	
Pedestrian Calls (#/hr)	0	0	0					0			0	
Act Effct Green (s)	38.0	38.0	38.0					34.0		16.0	54.0	
Actuated g/C Ratio	0.38	0.38	0.38					0.34		0.16	0.54	
v/c Ratio	0.25	0.35	0.12					0.78		0.20	0.12	
Control Delay	21.2	20.7	6.8					32.3		64.2	6.2	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay	21.2	20.7	6.8					32.3		64.2	6.2	
LOS	C	C	A					C		E	A	
Approach Delay		19.6						32.3			25.0	
Approach LOS		B						C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 40 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 26.9		Intersection LOS: C	
Intersection Capacity Utilization 49.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 30: Santa Rosa St & Dolorosa St





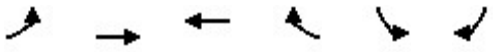
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	28	448	12	11	5	0	0	6	17
Future Volume (vph)	0	0	0	28	448	12	11	5	0	0	6	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.97							
Frt					0.996						0.899	
Flt Protected					0.997			0.967				
Satd. Flow (prot)	0	0	0	0	5050	0	0	1801	0	0	1675	0
Flt Permitted					0.997			0.778				
Satd. Flow (perm)	0	0	0	0	4904	0	0	1449	0	0	1675	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					7						21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		199			838			278			525	
Travel Time (s)		4.5			19.0			6.3			11.9	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	34	541	14	13	6	0	0	7	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	589	0	0	19	0	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				0	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				0	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			8			4	
Permitted Phases				2			8					
Detector Phase				2	2		8	8			4	
Switch Phase												
Minimum Initial (s)				10.0	10.0		5.0	5.0			5.0	
Minimum Split (s)				24.3	24.3		25.7	25.7			25.7	
Total Split (s)				68.0	68.0		32.0	32.0			32.0	
Total Split (%)				68.0%	68.0%		32.0%	32.0%			32.0%	
Maximum Green (s)				63.7	63.7		27.3	27.3			27.3	
Yellow Time (s)				3.2	3.2		3.2	3.2			3.2	
All-Red Time (s)				1.1	1.1		1.5	1.5			1.5	
Lost Time Adjust (s)					-0.3			-0.7			-0.7	
Total Lost Time (s)					4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				C-Max	C-Max		Min	Min			Min	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				13.0	13.0		14.0	14.0			14.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					85.9			6.1			6.1	
Actuated g/C Ratio					0.86			0.06			0.06	
v/c Ratio					0.14			0.22			0.23	
Control Delay					0.4			42.9			27.3	
Queue Delay					0.0			0.0			0.0	
Total Delay					0.4			42.9			27.3	
LOS					A			D			C	
Approach Delay					0.4			42.9			27.3	
Approach LOS					A			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 65 (65%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.23			
Intersection Signal Delay: 2.9		Intersection LOS: A	
Intersection Capacity Utilization 24.8%		ICU Level of Service A	
Analysis Period (min) 15			

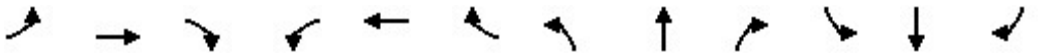
Splits and Phases: 31: Laredo St & Commerce St





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	728	0	0	32	0
Future Volume (vph)	10	728	0	0	32	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.999			0.950	
Satd. Flow (prot)	0	5080	0	0	1770	0
Flt Permitted		0.999			0.950	
Satd. Flow (perm)	0	5080	0	0	1770	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		395	843		127	
Travel Time (s)		9.0	19.2		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	13	950	0	0	42	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	963	0	0	42	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.1%		ICU Level of Service A	
Analysis Period (min) 15			

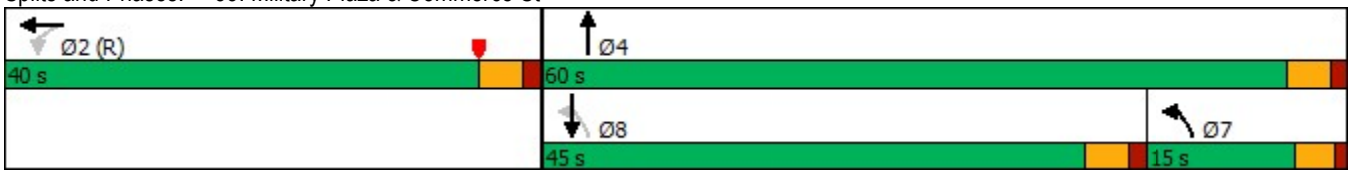


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	182	523	151	55	260	0	0	249	49
Future Volume (vph)	0	0	0	182	523	151	55	260	0	0	249	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.974						0.975	
Flt Protected					0.989			0.991				
Satd. Flow (prot)	0	0	0	0	4899	0	0	3507	0	0	3451	0
Flt Permitted					0.989			0.744				
Satd. Flow (perm)	0	0	0	0	4899	0	0	2633	0	0	3451	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					53						28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		838			265			167			470	
Travel Time (s)		19.0			6.0			3.8			10.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	220	631	182	66	314	0	0	300	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1033	0	0	380	0	0	359	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		D.P+P	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2			8					
Detector Phase				2	2		7	4			8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)				10.0	10.0		3.0	10.0			10.0	
Minimum Split (s)				14.7	14.7		10.4	38.0			15.0	
Total Split (s)				40.0	40.0		15.0	60.0			45.0	
Total Split (%)				40.0%	40.0%		15.0%	60.0%			45.0%	
Maximum Green (s)				35.3	35.3		11.0	55.4			40.4	
Yellow Time (s)				3.2	3.2		3.0	3.2			3.2	
All-Red Time (s)				1.5	1.5		1.0	1.4			1.4	
Lost Time Adjust (s)					-2.0			-2.0			-2.0	
Total Lost Time (s)					2.7			2.6			2.6	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				C-Max	C-Max		Min	Min			Min	
Act Effct Green (s)					71.6			23.1			15.6	
Actuated g/C Ratio					0.72			0.23			0.16	
v/c Ratio					0.29			0.58			0.64	
Control Delay					7.2			17.3			41.6	
Queue Delay					0.3			0.0			0.0	
Total Delay					7.5			17.3			41.6	
LOS					A			B			D	
Approach Delay					7.5			17.3			41.6	
Approach LOS					A			B			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 60 (60%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 16.5		Intersection LOS: B	
Intersection Capacity Utilization 48.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 33: Military Plaza & Commerce St



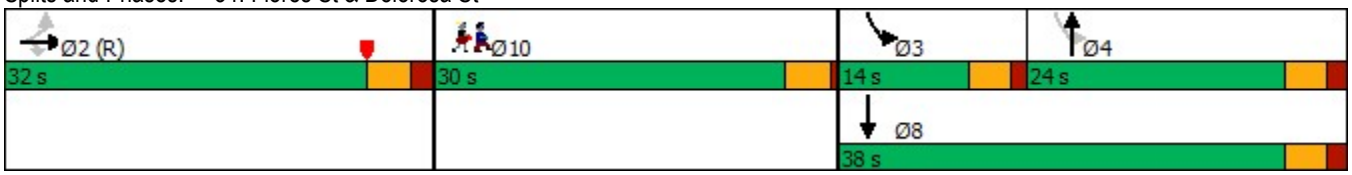
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	512	183	0	0	0	0	279	56	90	346	0
Future Volume (vph)	47	512	183	0	0	0	0	279	56	90	346	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	130		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850					0.975				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	3539	1583	0	0	0	0	3451	0	1770	3539	0
Flt Permitted	0.950									0.300		
Satd. Flow (perm)	1770	3539	1583	0	0	0	0	3451	0	559	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			234					21				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		843			462			543			226	
Travel Time (s)		19.2			10.5			12.3			5.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	61	668	239	0	0	0	0	364	73	117	451	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	61	668	239	0	0	0	0	437	0	117	451	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	0	100	20					100		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	0	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA		D.P+P	NA	
Protected Phases		2						4		3	8	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Growth Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2							4		
Detector Phase	2	2	2					4		3	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0		3.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					14.8		7.2	14.8	
Total Split (s)	32.0	32.0	32.0					24.0		14.0	38.0	
Total Split (%)	32.0%	32.0%	32.0%					24.0%		14.0%	38.0%	
Maximum Green (s)	27.0	27.0	27.0					19.2		9.8	33.2	
Yellow Time (s)	3.2	3.2	3.2					3.2		3.0	3.2	
All-Red Time (s)	1.8	1.8	1.8					1.6		1.2	1.6	
Lost Time Adjust (s)	0.0	-1.0	0.0					-0.8		-0.2	-0.8	
Total Lost Time (s)	5.0	4.0	5.0					4.0		4.0	4.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	C-Max	C-Max	C-Max					Max		Max	Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	27.0	28.0	27.0					20.0		60.0	64.0	
Actuated g/C Ratio	0.27	0.28	0.27					0.20		0.60	0.64	
v/c Ratio	0.13	0.67	0.40					0.62		0.14	0.20	
Control Delay	19.7	25.5	6.8					39.0		8.1	6.3	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay	19.7	25.5	6.8					39.0		8.1	6.3	
LOS	B	C	A					D		A	A	
Approach Delay		20.5						39.0			6.7	
Approach LOS		C						D			A	

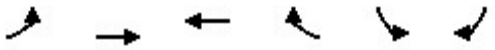
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 18 (18%), Referenced to phase 2:EBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 20.6		Intersection LOS: C	
Intersection Capacity Utilization 44.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 34: Flores St & Dolorosa St

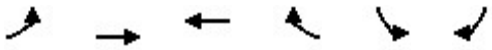


Lane Group	Ø10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	20.0
Total Split (s)	30.0
Total Split (%)	30%
Maximum Green (s)	26.0
Yellow Time (s)	3.5
All-Red Time (s)	0.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary



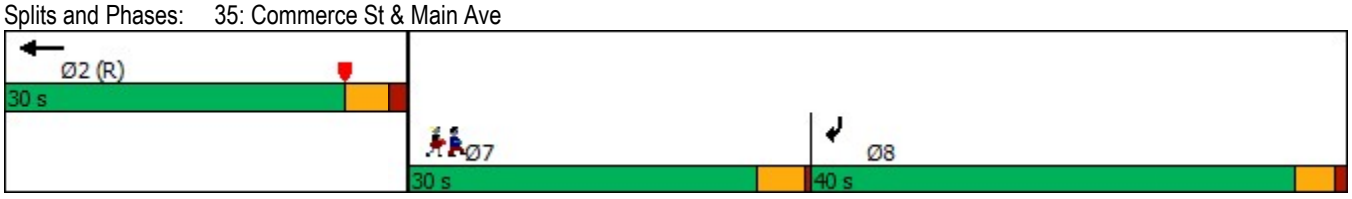
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø7
Lane Configurations							
Traffic Volume (vph)	0	0	566	4	0	149	
Future Volume (vph)	0	0	566	4	0	149	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0			150	0	0	
Storage Lanes	0			0	0	1	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00	
Frt			0.999			0.865	
Flt Protected							
Satd. Flow (prot)	0	0	5080	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	0	0	5080	0	0	1611	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			1			571	
Link Speed (mph)		30	30		30		
Link Distance (ft)		265	234		513		
Travel Time (s)		6.0	5.3		11.7		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Growth Factor	111%	111%	111%	111%	111%	111%	
Adj. Flow (vph)	0	0	683	5	0	180	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	688	0	0	180	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		0		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors			2			1	
Detector Template			Thru			Right	
Leading Detector (ft)			100			20	
Trailing Detector (ft)			0			0	
Detector 1 Position(ft)			0			0	
Detector 1 Size(ft)			6			20	
Detector 1 Type			Cl+Ex			Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)			0.0			0.0	
Detector 1 Queue (s)			0.0			0.0	
Detector 1 Delay (s)			0.0			0.0	
Detector 2 Position(ft)			94				
Detector 2 Size(ft)			6				
Detector 2 Type			Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)			0.0				
Turn Type			NA			Prot	
Protected Phases			2			8	7



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø7
Permitted Phases							
Detector Phase			2			8	
Switch Phase							
Minimum Initial (s)			10.0			6.0	3.0
Minimum Split (s)			22.7			25.0	9.0
Total Split (s)			30.0			40.0	30.0
Total Split (%)			30.0%			40.0%	30%
Maximum Green (s)			25.3			36.0	26.0
Yellow Time (s)			3.2			3.0	3.5
All-Red Time (s)			1.5			1.0	0.5
Lost Time Adjust (s)			-1.7			-2.0	
Total Lost Time (s)			3.0			2.0	
Lead/Lag						Lag	Lead
Lead-Lag Optimize?						Yes	Yes
Vehicle Extension (s)			1.0			1.0	3.0
Recall Mode			C-Max			None	None
Walk Time (s)			7.0			7.0	
Flash Dont Walk (s)			11.0			11.0	
Pedestrian Calls (#/hr)			0			0	
Act Effct Green (s)			87.0			8.0	
Actuated g/C Ratio			0.87			0.08	
v/c Ratio			0.16			0.28	
Control Delay			0.5			1.0	
Queue Delay			0.2			0.0	
Total Delay			0.6			1.0	
LOS			A			A	
Approach Delay			0.6		1.0		
Approach LOS			A		A		

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 13 (13%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay: 0.7		Intersection LOS: A	
Intersection Capacity Utilization 29.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 35: Commerce St & Main Ave

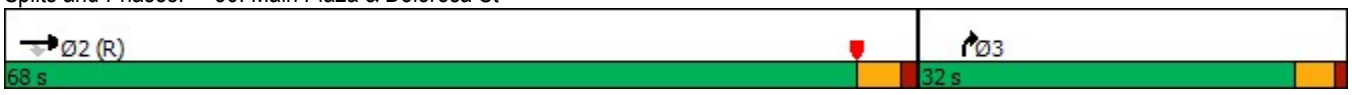


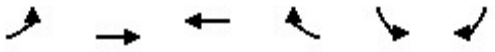
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	658	0	0	0	0	4
Future Volume (vph)	658	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		100	0		0	0
Storage Lanes		1	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	1863	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	1863	0	0	0	1611
Right Turn on Red		Yes				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	462			507	380	
Travel Time (s)	10.5			11.5	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	844	0	0	0	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	844	0	0	0	0	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1				1
Detector Template	Thru					Right
Leading Detector (ft)	100	0				20
Trailing Detector (ft)	0	0				0
Detector 1 Position(ft)	0	0				0
Detector 1 Size(ft)	6	0				20
Detector 1 Type	Cl+Ex	Cl+Ex				Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0				0.0
Detector 1 Queue (s)	0.0	0.0				0.0
Detector 1 Delay (s)	0.0	0.0				0.0
Detector 2 Position(ft)	94					
Detector 2 Size(ft)	6					
Detector 2 Type	Cl+Ex					
Detector 2 Channel						
Detector 2 Extend (s)	0.0					
Turn Type	NA	Perm				Prot
Protected Phases	2					3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases		2				
Detector Phase	2	2				3
Switch Phase						
Minimum Initial (s)	10.0	10.0				3.0
Minimum Split (s)	20.6	20.6				22.0
Total Split (s)	68.0	68.0				32.0
Total Split (%)	68.0%	68.0%				32.0%
Maximum Green (s)	63.4	63.4				28.0
Yellow Time (s)	3.2	3.2				3.0
All-Red Time (s)	1.4	1.4				1.0
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	4.6	4.6				4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0	1.0				1.0
Recall Mode	C-Max	C-Max				Max
Walk Time (s)						7.0
Flash Dont Walk (s)						11.0
Pedestrian Calls (#/hr)						0
Act Effct Green (s)	63.4					28.0
Actuated g/C Ratio	0.63					0.28
v/c Ratio	0.38					0.01
Control Delay	2.0					26.2
Queue Delay	0.0					0.0
Total Delay	2.1					26.2
LOS	A					C
Approach Delay	2.1				26.2	
Approach LOS	A				C	

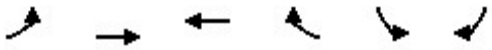
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 30 (30%), Referenced to phase 2:EBT, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 2.2		Intersection LOS: A	
Intersection Capacity Utilization 32.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 36: Main Plaza & Dolorosa St





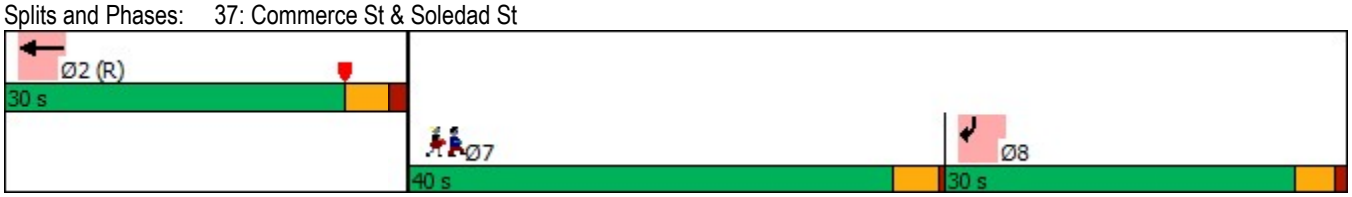
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø7
Lane Configurations							
Traffic Volume (vph)	0	0	568	217	0	4	
Future Volume (vph)	0	0	568	217	0	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0			150	0	0	
Storage Lanes	0			0	0	1	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00	
Frt			0.959			0.865	
Flt Protected							
Satd. Flow (prot)	0	0	4877	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	0	0	4877	0	0	1611	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			92			652	
Link Speed (mph)		30	30		30		
Link Distance (ft)		234	520		565		
Travel Time (s)		5.3	11.8		12.8		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Growth Factor	111%	111%	111%	111%	111%	111%	
Adj. Flow (vph)	0	0	685	262	0	5	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	947	0	0	5	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		0		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors			2			1	
Detector Template			Thru			Right	
Leading Detector (ft)			100			20	
Trailing Detector (ft)			0			0	
Detector 1 Position(ft)			0			0	
Detector 1 Size(ft)			6			20	
Detector 1 Type			Cl+Ex			Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)			0.0			0.0	
Detector 1 Queue (s)			0.0			0.0	
Detector 1 Delay (s)			0.0			0.0	
Detector 2 Position(ft)			94				
Detector 2 Size(ft)			6				
Detector 2 Type			Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)			0.0				
Turn Type			NA			Prot	
Protected Phases			2			8	7

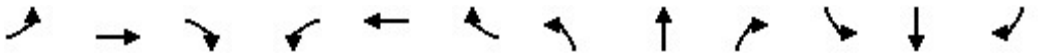


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø7
Permitted Phases							
Detector Phase			2			8	
Switch Phase							
Minimum Initial (s)			10.0			6.0	3.0
Minimum Split (s)			22.7			25.0	9.0
Total Split (s)			30.0			30.0	40.0
Total Split (%)			30.0%			30.0%	40%
Maximum Green (s)			25.3			26.0	36.0
Yellow Time (s)			3.2			3.0	3.5
All-Red Time (s)			1.5			1.0	0.5
Lost Time Adjust (s)			0.0			0.0	
Total Lost Time (s)			4.7			4.0	
Lead/Lag						Lag	Lead
Lead-Lag Optimize?						Yes	Yes
Vehicle Extension (s)			1.0			1.0	3.0
Recall Mode			C-Max			None	None
Walk Time (s)			7.0			7.0	
Flash Dont Walk (s)			11.0			11.0	
Pedestrian Calls (#/hr)			0			0	
Act Effct Green (s)			97.1			6.0	
Actuated g/C Ratio			0.97			0.06	
v/c Ratio			0.20			0.01	
Control Delay			0.2			0.0	
Queue Delay			0.0			0.0	
Total Delay			0.2			0.0	
LOS			A			A	
Approach Delay			0.2				
Approach LOS			A				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 13 (13%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.20			
Intersection Signal Delay: 0.2		Intersection LOS: A	
Intersection Capacity Utilization 29.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Commerce St & Soledad St



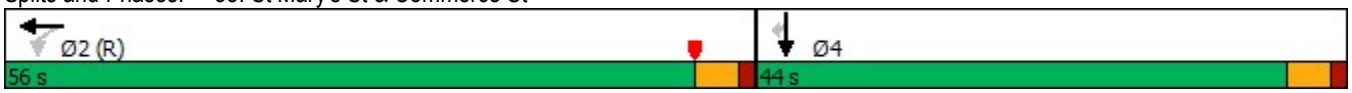


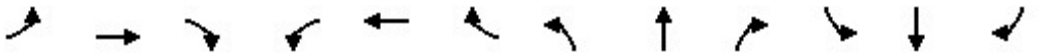
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	158	709	0	0	0	0	0	298	84
Future Volume (vph)	0	0	0	158	709	0	0	0	0	0	298	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		150
Storage Lanes	0		0	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												0.850
Flt Protected					0.991							
Satd. Flow (prot)	0	0	0	0	5040	0	0	0	0	0	3539	1583
Flt Permitted					0.991							
Satd. Flow (perm)	0	0	0	0	5040	0	0	0	0	0	3539	1583
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)												101
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		520			534			212			290	
Travel Time (s)		11.8			12.1			4.8			6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	191	855	0	0	0	0	0	360	101
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1046	0	0	0	0	0	360	101
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				0	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				0	6						6	20
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	Perm
Protected Phases					2						4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2								4
Detector Phase				2	2						4	4
Switch Phase												
Minimum Initial (s)				10.0	10.0						5.0	5.0
Minimum Split (s)				26.6	26.6						26.6	26.6
Total Split (s)				56.0	56.0						44.0	44.0
Total Split (%)				56.0%	56.0%						44.0%	44.0%
Maximum Green (s)				51.4	51.4						39.4	39.4
Yellow Time (s)				3.2	3.2						3.2	3.2
All-Red Time (s)				1.4	1.4						1.4	1.4
Lost Time Adjust (s)					-0.6						-0.6	0.0
Total Lost Time (s)					4.0						4.0	4.6
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0						1.0	1.0
Recall Mode				C-Max	C-Max						Max	Max
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Dont Walk (s)				15.0	15.0						15.0	15.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)					52.0						40.0	39.4
Actuated g/C Ratio					0.52						0.40	0.39
v/c Ratio					0.40						0.25	0.15
Control Delay					6.2						20.6	4.6
Queue Delay					0.0						0.1	0.0
Total Delay					6.2						20.7	4.6
LOS					A						C	A
Approach Delay					6.2						17.2	
Approach LOS					A						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 7 (7%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 9.6		Intersection LOS: A	
Intersection Capacity Utilization 34.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 38: St Mary's St & Commerce St



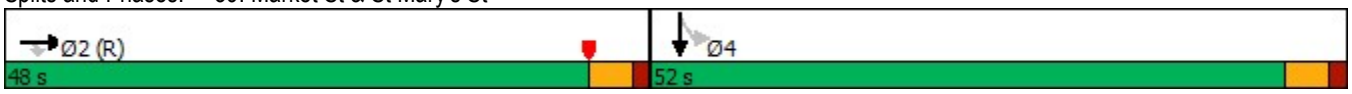


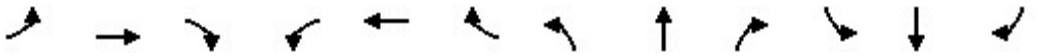
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	578	201	0	0	0	0	0	0	160	224	0
Future Volume (vph)	0	578	201	0	0	0	0	0	0	160	224	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	0		150
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									
Flt Protected											0.980	
Satd. Flow (prot)	0	3390	1441	0	0	0	0	0	0	0	3468	0
Flt Permitted											0.980	
Satd. Flow (perm)	0	3390	1441	0	0	0	0	0	0	0	3468	0
Right Turn on Red			Yes			Yes			Yes	No		Yes
Satd. Flow (RTOR)			202									
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		507			530			201			212	
Travel Time (s)		11.5			12.0			4.6			4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	0	741	258	0	0	0	0	0	0	205	287	0
Shared Lane Traffic (%)			0%									
Lane Group Flow (vph)	0	741	258	0	0	0	0	0	0	0	492	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1							1	2	
Detector Template		Thru	Right							Left	Thru	
Leading Detector (ft)		100	20							0	100	
Trailing Detector (ft)		0	0							0	0	
Detector 1 Position(ft)		0	0							0	0	
Detector 1 Size(ft)		6	20							0	6	
Detector 1 Type		Cl+Ex	Cl+Ex							Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0							0.0	0.0	
Detector 1 Queue (s)		0.0	0.0							0.0	0.0	
Detector 1 Delay (s)		0.0	0.0							0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2							4		
Detector Phase		2	2							4	4	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		14.5	14.5							14.7	14.7	
Total Split (s)		48.0	48.0							52.0	52.0	
Total Split (%)		48.0%	48.0%							52.0%	52.0%	
Maximum Green (s)		43.5	43.5							47.3	47.3	
Yellow Time (s)		3.2	3.2							3.2	3.2	
All-Red Time (s)		1.3	1.3							1.5	1.5	
Lost Time Adjust (s)		-0.5	0.0								-0.7	
Total Lost Time (s)		4.0	4.5								4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0	1.0							1.0	1.0	
Recall Mode		C-Max	C-Max							Max	Max	
Act Effct Green (s)		44.0	43.5								48.0	
Actuated g/C Ratio		0.44	0.44								0.48	
v/c Ratio		0.50	0.35								0.30	
Control Delay		6.2	1.7								20.1	
Queue Delay		0.0	0.0								3.4	
Total Delay		6.2	1.7								23.5	
LOS		A	A								C	
Approach Delay		5.0									23.5	
Approach LOS		A									C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 45 (45%), Referenced to phase 2:EBT, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 11.1		Intersection LOS: B	
Intersection Capacity Utilization 40.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 39: Market St & St Mary's St



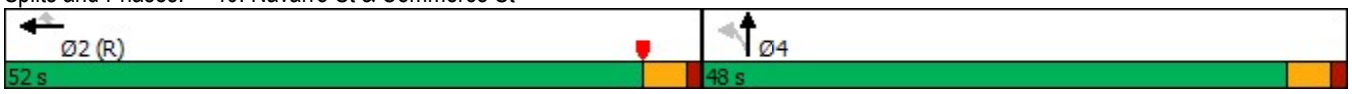


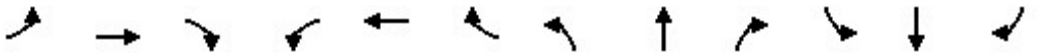
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1096	198	157	508	0	0	0	0
Future Volume (vph)	0	0	0	0	1096	198	157	508	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt						0.850						
Flt Protected								0.988				
Satd. Flow (prot)	0	0	0	0	5085	1583	0	5024	0	0	0	0
Flt Permitted								0.988				
Satd. Flow (perm)	0	0	0	0	5085	1583	0	5024	0	0	0	0
Right Turn on Red			Yes			Yes	No		Yes			Yes
Satd. Flow (RTOR)						105						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		534			258			251			297	
Travel Time (s)		12.1			5.9			5.7			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	0	1322	239	189	613	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1322	239	0	802	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	0	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	0	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					2			4				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						2	4					
Detector Phase					2	2	4	4				
Switch Phase												
Minimum Initial (s)					10.0	10.0	5.0	5.0				
Minimum Split (s)					14.5	14.5	9.6	9.6				
Total Split (s)					52.0	52.0	48.0	48.0				
Total Split (%)					52.0%	52.0%	48.0%	48.0%				
Maximum Green (s)					47.5	47.5	43.4	43.4				
Yellow Time (s)					3.2	3.2	3.2	3.2				
All-Red Time (s)					1.3	1.3	1.4	1.4				
Lost Time Adjust (s)					-1.7	-1.7		-2.0				
Total Lost Time (s)					2.8	2.8		2.6				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					1.0	1.0	1.0	1.0				
Recall Mode					C-Max	C-Max	Max	Max				
Act Effct Green (s)					49.2	49.2		45.4				
Actuated g/C Ratio					0.49	0.49		0.45				
v/c Ratio					0.53	0.29		0.35				
Control Delay					4.7	1.1		14.8				
Queue Delay					0.2	0.5		0.6				
Total Delay					4.9	1.6		15.4				
LOS					A	A		B				
Approach Delay					4.4			15.4				
Approach LOS					A			B				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 85 (85%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 8.2		Intersection LOS: A	
Intersection Capacity Utilization 44.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Navarro St & Commerce St



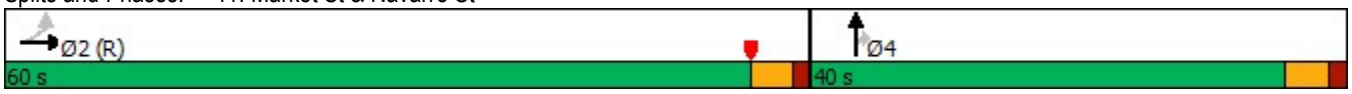


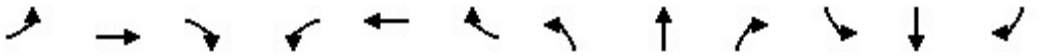
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	257	487	0	0	0	0	0	361	59	0	0	0
Future Volume (vph)	257	487	0	0	0	0	0	361	59	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected		0.983										
Satd. Flow (prot)	0	3479	0	0	0	0	0	3539	1583	0	0	0
Flt Permitted		0.983										
Satd. Flow (perm)	0	3479	0	0	0	0	0	3539	1583	0	0	0
Right Turn on Red	No		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									76			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		530			100			275			251	
Travel Time (s)		12.0			2.3			6.3			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	330	625	0	0	0	0	0	463	76	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	955	0	0	0	0	0	463	76	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2	1			
Detector Template	Left	Thru						Thru	Right			
Leading Detector (ft)	0	100						100	20			
Trailing Detector (ft)	0	0						0	0			
Detector 1 Position(ft)	0	0						0	0			
Detector 1 Size(ft)	0	6						6	20			
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0	0.0			
Detector 1 Queue (s)	0.0	0.0						0.0	0.0			
Detector 1 Delay (s)	0.0	0.0						0.0	0.0			
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0				
Turn Type	Perm	NA						NA	Perm			
Protected Phases		2						4				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2								4			
Detector Phase	2	2						4	4			
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0	10.0			
Minimum Split (s)	14.5	14.5						14.7	14.7			
Total Split (s)	60.0	60.0						40.0	40.0			
Total Split (%)	60.0%	60.0%						40.0%	40.0%			
Maximum Green (s)	55.5	55.5						35.3	35.3			
Yellow Time (s)	3.2	3.2						3.2	3.2			
All-Red Time (s)	1.3	1.3						1.5	1.5			
Lost Time Adjust (s)		-1.7						-2.0	-2.0			
Total Lost Time (s)		2.8						2.7	2.7			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0	1.0			
Recall Mode	C-Max	C-Max						Max	Max			
Act Effct Green (s)		57.2						37.3	37.3			
Actuated g/C Ratio		0.57						0.37	0.37			
v/c Ratio		0.48						0.35	0.12			
Control Delay		4.6						23.6	5.4			
Queue Delay		0.0						0.0	0.0			
Total Delay		4.6						23.6	5.4			
LOS		A						C	A			
Approach Delay		4.6						21.0				
Approach LOS		A						C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 75 (75%), Referenced to phase 2:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay: 10.6		Intersection LOS: B	
Intersection Capacity Utilization 43.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Market St & Navarro St



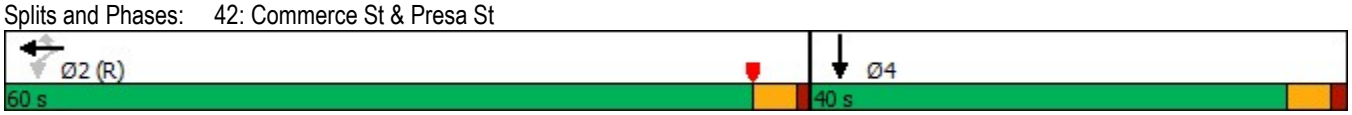


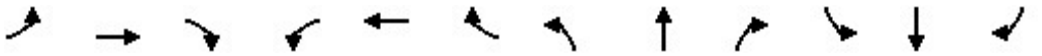
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	61	1014	68	0	0	0	0	32	12
Future Volume (vph)	0	0	0	61	1014	68	0	0	0	0	32	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.80						
Frt						0.850					0.964	
Flt Protected					0.997							
Satd. Flow (prot)	0	0	0	0	5070	1583	0	0	0	0	1796	0
Flt Permitted					0.997							
Satd. Flow (perm)	0	0	0	0	5070	1273	0	0	0	0	1796	0
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)						42					14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		258			287			74			386	
Travel Time (s)		5.9			6.5			1.7			8.8	
Confl. Peds. (#/hr)						200						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	74	1223	82	0	0	0	0	39	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1297	82	0	0	0	0	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1					2	
Detector Template				Left	Thru	Right					Thru	
Leading Detector (ft)				0	100	20					100	
Trailing Detector (ft)				0	0	0					0	
Detector 1 Position(ft)				0	0	0					0	
Detector 1 Size(ft)				0	6	20					6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0					0.0	
Detector 1 Queue (s)				0.0	0.0	0.0					0.0	
Detector 1 Delay (s)				0.0	0.0	0.0					0.0	
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA	Perm					NA	
Protected Phases					2						4	
Permitted Phases				2		2						
Detector Phase				2	2	2					4	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0					5.0	
Minimum Split (s)				14.3	14.3	14.3					9.6	
Total Split (s)				60.0	60.0	60.0					40.0	
Total Split (%)				60.0%	60.0%	60.0%					40.0%	
Maximum Green (s)				55.7	55.7	55.7					35.4	
Yellow Time (s)				3.2	3.2	3.2					3.2	
All-Red Time (s)				1.1	1.1	1.1					1.4	
Lost Time Adjust (s)					-0.3	0.0					-0.6	
Total Lost Time (s)					4.0	4.3					4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0					1.0	
Recall Mode				C-Max	C-Max	C-Max					Max	
Act Effct Green (s)					56.0	55.7					36.0	
Actuated g/C Ratio					0.56	0.56					0.36	
v/c Ratio					0.46	0.11					0.08	
Control Delay					1.6	0.3					17.1	
Queue Delay					0.1	0.0					0.0	
Total Delay					1.7	0.3					17.1	
LOS					A	A					B	
Approach Delay					1.6						17.1	
Approach LOS					A						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 80 (80%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay: 2.2		Intersection LOS: A	
Intersection Capacity Utilization 34.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 42: Commerce St & Presa St



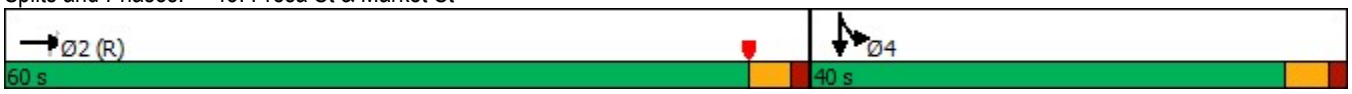


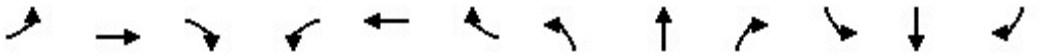
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	534	12	0	0	0	0	0	9	37	21	0
Future Volume (vph)	0	534	12	0	0	0	0	0	9	37	21	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850						0.865			
Flt Protected										0.950		
Satd. Flow (prot)	0	3390	1441	0	0	0	0	0	1611	1681	1770	0
Flt Permitted										0.950		
Satd. Flow (perm)	0	3390	1441	0	0	0	0	0	1611	1681	1770	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			70						924	47		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		159			275			339			188	
Travel Time (s)		3.6			6.3			7.7			4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	0	685	15	0	0	0	0	0	12	47	27	0
Shared Lane Traffic (%)			0%							0%		
Lane Group Flow (vph)	0	685	15	0	0	0	0	0	12	47	27	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1						1	1	2	
Detector Template		Thru	Right						Right	Left	Thru	
Leading Detector (ft)		100	20						20	20	100	
Trailing Detector (ft)		0	0						0	0	0	
Detector 1 Position(ft)		0	0						0	0	0	
Detector 1 Size(ft)		6	20						20	20	6	
Detector 1 Type		Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0						0.0	0.0	0.0	
Detector 1 Queue (s)		0.0	0.0						0.0	0.0	0.0	
Detector 1 Delay (s)		0.0	0.0						0.0	0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA	NA						Perm	Split	NA	
Protected Phases		2								4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases									2			
Detector Phase		2							2	4	4	
Switch Phase												
Minimum Initial (s)		10.0							10.0	5.0	5.0	
Minimum Split (s)		14.7							14.7	9.7	9.7	
Total Split (s)		60.0							60.0	40.0	40.0	
Total Split (%)		60.0%							60.0%	40.0%	40.0%	
Maximum Green (s)		55.3							55.3	35.3	35.3	
Yellow Time (s)		3.2							3.2	3.2	3.2	
All-Red Time (s)		1.5							1.5	1.5	1.5	
Lost Time Adjust (s)		-0.7							-0.7	-0.7	-0.7	
Total Lost Time (s)		4.0							4.0	4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0							1.0	1.0	1.0	
Recall Mode		C-Max							C-Max	Max	Max	
Act Effct Green (s)		56.0	0.0						56.0	36.0	36.0	
Actuated g/C Ratio		0.56	0.00						0.56	0.36	0.36	
v/c Ratio		0.36	0.21						0.01	0.07	0.04	
Control Delay		2.4	11.1						0.0	11.8	24.1	
Queue Delay		0.2	0.0						0.0	0.0	0.0	
Total Delay		2.6	11.1						0.0	11.8	24.1	
LOS		A	B						A	B	C	
Approach Delay		2.7									16.3	
Approach LOS		A									B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 80 (80%), Referenced to phase 2:EBT, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay: 4.0		Intersection LOS: A	
Intersection Capacity Utilization 34.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 43: Presa St & Market St





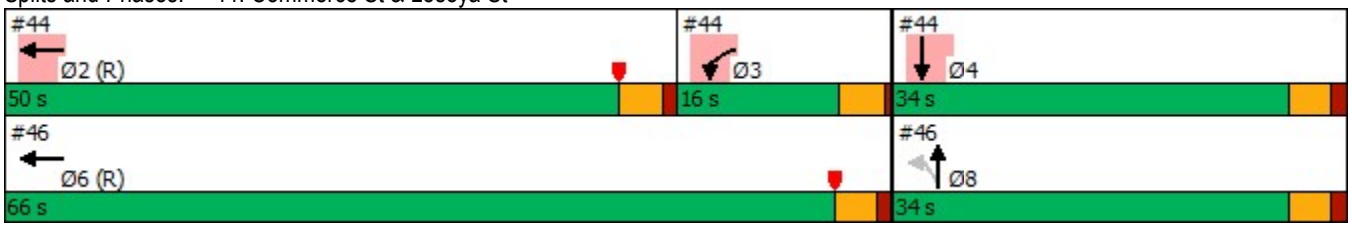
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	118	1139	0	0	0	0	0	179	78
Future Volume (vph)	0	0	0	118	1139	0	0	0	0	0	179	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt											0.955	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	5085	0	0	0	0	0	3380	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	5085	0	0	0	0	0	3380	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				129							72	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		287			180			173			345	
Travel Time (s)		6.5			4.1			3.9			7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	142	1374	0	0	0	0	0	216	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	142	1374	0	0	0	0	0	310	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	
Detector Template				Left	Thru						Thru	
Leading Detector (ft)				20	100						100	
Trailing Detector (ft)				0	0						0	
Detector 1 Position(ft)				0	0						0	
Detector 1 Size(ft)				20	6						6	
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	
Detector 1 Queue (s)				0.0	0.0						0.0	
Detector 1 Delay (s)				0.0	0.0						0.0	
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Prot	NA						NA	
Protected Phases				3	2						4	
Permitted Phases												
Detector Phase				3	2						4	
Switch Phase												

Lane Group	Ø6	Ø8
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Growth Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	6	8
Permitted Phases		
Detector Phase		
Switch Phase		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)				3.2	10.0						5.7	
Minimum Split (s)				7.2	14.5						10.2	
Total Split (s)				16.0	50.0						34.0	
Total Split (%)				16.0%	50.0%						34.0%	
Maximum Green (s)				12.0	45.7						29.5	
Yellow Time (s)				3.5	3.2						3.2	
All-Red Time (s)				0.5	1.1						1.3	
Lost Time Adjust (s)				-1.3	-1.3						-2.0	
Total Lost Time (s)				2.7	3.0						2.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	1.0						1.0	
Recall Mode				None	C-Max						Max	
Walk Time (s)					7.0						7.0	
Flash Dont Walk (s)					10.0						12.0	
Pedestrian Calls (#/hr)					0						0	
Act Effct Green (s)				13.3	47.0						31.5	
Actuated g/C Ratio				0.13	0.47						0.32	
v/c Ratio				0.41	0.58						0.28	
Control Delay				25.8	3.1						20.3	
Queue Delay				1.7	0.3						0.0	
Total Delay				27.5	3.4						20.3	
LOS				C	A						C	
Approach Delay					5.7						20.3	
Approach LOS					A						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 70 (70%), Referenced to phase 2:WBT and 6:, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 8.2		Intersection LOS: A	
Intersection Capacity Utilization 39.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 44: Commerce St & Losoya St



Lane Group	Ø6	Ø8
Minimum Initial (s)	10.0	5.3
Minimum Split (s)	14.3	9.8
Total Split (s)	66.0	34.0
Total Split (%)	66%	34%
Maximum Green (s)	61.7	29.5
Yellow Time (s)	3.2	3.2
All-Red Time (s)	1.1	1.3
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	1.0	1.0
Recall Mode	C-Max	Min
Walk Time (s)	7.0	
Flash Dont Walk (s)	10.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		

Intersection Summary

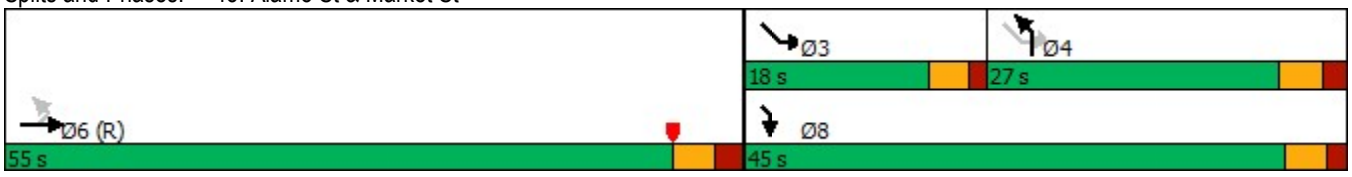


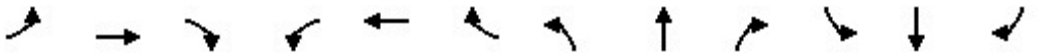
Lane Group	EBL2	EBT	EBR	NBL	NBR	SEL	SER
Lane Configurations							
Traffic Volume (vph)	67	484	61	229	244	283	264
Future Volume (vph)	67	484	61	229	244	283	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			50	0	0	0	0
Storage Lanes			1	2	1	1	2
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	1.00	0.97	1.00	1.00	0.91
Frt			0.850		0.850	0.954	0.850
Flt Protected		0.994		0.950		0.966	
Satd. Flow (prot)	0	3518	1583	3433	1583	1717	2882
Flt Permitted		0.994		0.950		0.490	
Satd. Flow (perm)	0	3518	1583	3433	1583	871	2882
Right Turn on Red			Yes		Yes		
Satd. Flow (RTOR)			129		211		
Link Speed (mph)		30				30	
Link Distance (ft)		223				161	
Travel Time (s)		5.1				3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	86	621	78	294	313	363	339
Shared Lane Traffic (%)							47%
Lane Group Flow (vph)	0	707	78	294	313	522	180
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Right
Median Width(ft)		0				12	
Link Offset(ft)		0				0	
Crosswalk Width(ft)		16				16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15	9	15	9
Number of Detectors	1	2	1	1	1	1	1
Detector Template	Left	Thru	Right	Left	Right	Left	Right
Leading Detector (ft)	20	100	20	20	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94					
Detector 2 Size(ft)		6					
Detector 2 Type		Cl+Ex					
Detector 2 Channel							
Detector 2 Extend (s)		0.0					
Turn Type	Perm	NA	NA	Prot	Perm	D.P+P	Prot
Protected Phases		6		4		3	8

Lane Group	EBL2	EBT	EBR	NBL	NBR	SEL	SER
Permitted Phases	6				4	4	
Detector Phase	6	6		4	4	3	8
Switch Phase							
Minimum Initial (s)	10.0	10.0		5.0	5.0	3.0	5.0
Minimum Split (s)	15.3	15.3		10.2	10.2	7.3	9.8
Total Split (s)	55.0	55.0		27.0	27.0	18.0	45.0
Total Split (%)	55.0%	55.0%		27.0%	27.0%	18.0%	45.0%
Maximum Green (s)	49.7	49.7		21.8	21.8	13.7	40.2
Yellow Time (s)	3.2	3.2		3.2	3.2	3.0	3.2
All-Red Time (s)	2.1	2.1		2.0	2.0	1.3	1.6
Lost Time Adjust (s)		-1.3		0.0	-1.2	-0.3	-0.8
Total Lost Time (s)		4.0		5.2	4.0	4.0	4.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0	1.0	1.0
Recall Mode	C-Min	C-Min		Min	Min	Min	Min
Walk Time (s)	7.0	7.0		7.0	7.0		7.0
Flash Dont Walk (s)	20.0	20.0		14.0	14.0		14.0
Pedestrian Calls (#/hr)	0	0		0	0		0
Act Effct Green (s)		36.2	0.0	13.1	14.3	51.8	55.8
Actuated g/C Ratio		0.36	0.00	0.13	0.14	0.52	0.56
v/c Ratio		0.56	0.60	0.65	0.77	0.68	0.11
Control Delay		16.9	37.2	47.6	26.5	18.7	7.6
Queue Delay		0.0	0.0	0.0	0.0	0.9	0.0
Total Delay		16.9	37.2	47.6	26.5	19.5	7.6
LOS		B	D	D	C	B	A
Approach Delay		18.9				16.5	
Approach LOS		B				B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 85 (85%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 23.3		Intersection LOS: C	
Intersection Capacity Utilization 58.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 45: Alamo St & Market St





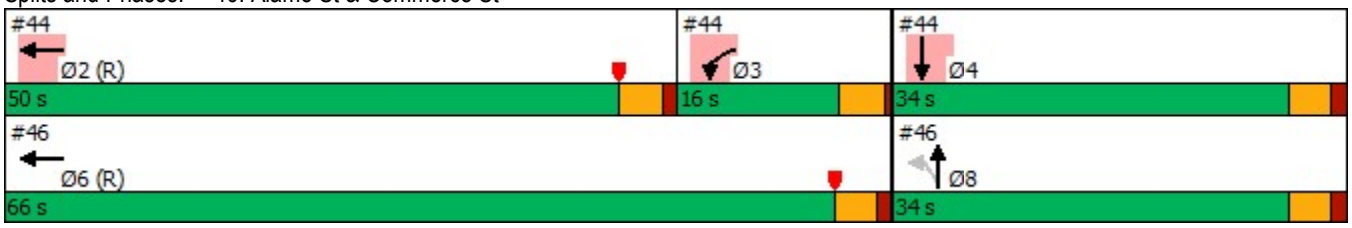
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1280	16	91	223	0	0	0	4
Future Volume (vph)	0	0	0	0	1280	16	91	223	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	0.95	0.95	1.00	1.00	1.00	1.00
Frt					0.998						0.850	
Flt Protected							0.950	0.998				
Satd. Flow (prot)	0	0	0	0	6395	0	1681	1766	0	0	0	0
Flt Permitted							0.950	0.998				
Satd. Flow (perm)	0	0	0	0	6395	0	1681	1766	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					4		61	61			110	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		180			539			263			375	
Travel Time (s)		4.1			12.3			6.0			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	118%	118%	111%	111%	118%	118%	118%	111%	118%	111%
Adj. Flow (vph)	0	0	0	0	1544	19	117	286	0	0	0	5
Shared Lane Traffic (%)							10%					
Lane Group Flow (vph)	0	0	0	0	1563	0	105	298	0	0	5	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2		1	2				
Detector Template					Thru		Left	Thru				
Leading Detector (ft)					100		20	100				
Trailing Detector (ft)					0		0	0				
Detector 1 Position(ft)					0		0	0				
Detector 1 Size(ft)					6		20	6				
Detector 1 Type					Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0		0.0	0.0				
Detector 1 Queue (s)					0.0		0.0	0.0				
Detector 1 Delay (s)					0.0		0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA		Perm	NA				
Protected Phases					6			8				

Lane Group	Ø2	Ø3	Ø4
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Growth Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Number of Detectors			
Detector Template			
Leading Detector (ft)			
Trailing Detector (ft)			
Detector 1 Position(ft)			
Detector 1 Size(ft)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Detector 2 Position(ft)			
Detector 2 Size(ft)			
Detector 2 Type			
Detector 2 Channel			
Detector 2 Extend (s)			
Turn Type			
Protected Phases	2	3	4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8					
Detector Phase					6		8	8				
Switch Phase												
Minimum Initial (s)					10.0		5.3	5.3				
Minimum Split (s)					14.3		9.8	9.8				
Total Split (s)					66.0		34.0	34.0				
Total Split (%)					66.0%		34.0%	34.0%				
Maximum Green (s)					61.7		29.5	29.5				
Yellow Time (s)					3.2		3.2	3.2				
All-Red Time (s)					1.1		1.3	1.3				
Lost Time Adjust (s)					-1.7		0.0	0.0				
Total Lost Time (s)					2.6		4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					1.0		1.0	1.0				
Recall Mode					C-Max		Min	Min				
Walk Time (s)					7.0							
Flash Dont Walk (s)					10.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)					63.4		29.5	29.5			0.0	
Actuated g/C Ratio					0.63		0.30	0.30			0.00	
v/c Ratio					0.39		0.20	0.53			0.05	
Control Delay					6.6		13.6	27.1			0.0	
Queue Delay					0.0		0.0	7.3			0.0	
Total Delay					6.6		13.6	34.4			0.0	
LOS					A		B	C			A	
Approach Delay					6.6			29.0				
Approach LOS					A			C				

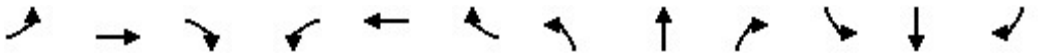
Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 70 (70%), Referenced to phase 2:WBT and 6:, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 39.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 46: Alamo St & Commerce St



Lane Group	Ø2	Ø3	Ø4
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	10.0	3.2	5.7
Minimum Split (s)	14.5	7.2	10.2
Total Split (s)	50.0	16.0	34.0
Total Split (%)	50%	16%	34%
Maximum Green (s)	45.7	12.0	29.5
Yellow Time (s)	3.2	3.5	3.2
All-Red Time (s)	1.1	0.5	1.3
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag			
Lead-Lag Optimize?			
Vehicle Extension (s)	1.0	3.0	1.0
Recall Mode	C-Max	None	Max
Walk Time (s)	7.0		7.0
Flash Dont Walk (s)	10.0		12.0
Pedestrian Calls (#/hr)	0		0
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			

Intersection Summary



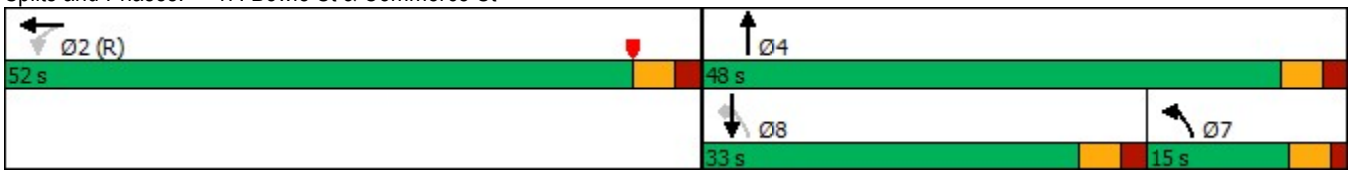
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	208	1368	223	4	61	0	0	214	53
Future Volume (vph)	0	0	0	208	1368	223	4	61	0	0	214	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	0.95	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor				0.79								
Frt					0.979							0.850
Flt Protected				0.950				0.997				
Satd. Flow (prot)	0	0	0	1770	4979	0	0	3529	0	0	3539	1583
Flt Permitted				0.950				0.953				
Satd. Flow (perm)	0	0	0	1390	4979	0	0	3373	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					43							81
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		890			635			287			349	
Travel Time (s)		20.2			14.4			6.5			7.9	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	251	1651	269	5	74	0	0	258	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	251	1920	0	0	79	0	0	258	64
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	1
Detector Template				Left	Thru		Left	Thru			Thru	Right
Leading Detector (ft)				20	100		0	100			100	20
Trailing Detector (ft)				0	0		0	0			0	0
Detector 1 Position(ft)				0	0		0	0			0	0
Detector 1 Size(ft)				20	6		0	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

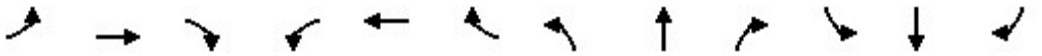
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		D.P+P	NA			NA	Perm
Protected Phases					2		7	4			8	
Permitted Phases				2			8					8
Detector Phase				2	2		7	4			8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0		3.0	5.0			5.0	5.0
Minimum Split (s)				33.3	33.3		7.4	29.1			27.1	27.1
Total Split (s)				52.0	52.0		15.0	48.0			33.0	33.0
Total Split (%)				52.0%	52.0%		15.0%	48.0%			33.0%	33.0%
Maximum Green (s)				46.7	46.7		10.6	42.9			27.9	27.9
Yellow Time (s)				3.2	3.2		3.0	3.2			3.2	3.2
All-Red Time (s)				2.1	2.1		1.4	1.9			1.9	1.9
Lost Time Adjust (s)				-1.3	-1.3			-1.1			-1.1	-1.1
Total Lost Time (s)				4.0	4.0			4.0			4.0	4.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0		1.0	1.0			1.0	1.0
Recall Mode				C-Max	C-Max		Max	Max			Max	Max
Walk Time (s)				7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)				21.0	21.0			17.0			15.0	15.0
Pedestrian Calls (#/hr)				0	0			0			0	0
Act Effct Green (s)				48.0	48.0			44.0			29.0	29.0
Actuated g/C Ratio				0.48	0.48			0.44			0.29	0.29
v/c Ratio				0.38	0.80			0.05			0.25	0.12
Control Delay				18.6	24.5			26.2			28.0	4.8
Queue Delay				0.0	0.0			0.0			0.0	0.0
Total Delay				18.6	24.5			26.2			28.0	4.8
LOS				B	C			C			C	A
Approach Delay					23.8			26.2			23.4	
Approach LOS					C			C			C	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 25 (25%), Referenced to phase 2:WBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 23.8 Intersection LOS: C
Intersection Capacity Utilization 53.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 47: Bowie St & Commerce St





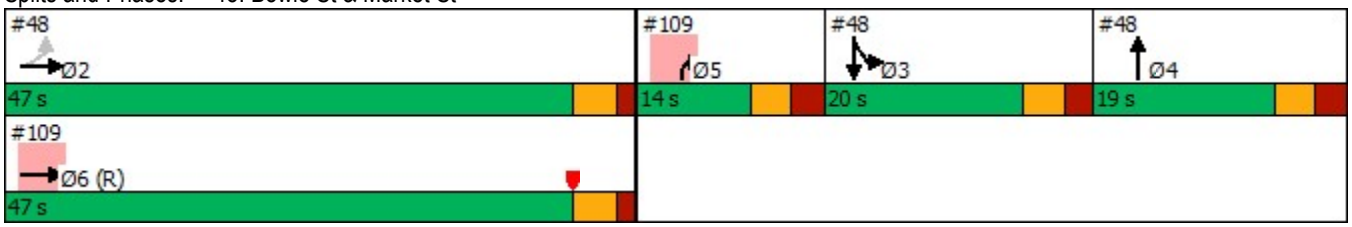
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	133	425	12	0	0	0	0	21	20	208	64	0
Future Volume (vph)	133	425	12	0	0	0	0	21	20	208	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.997						0.934				
Flt Protected		0.988								0.950	0.975	
Satd. Flow (prot)	0	5009	0	0	0	0	0	1740	0	1681	1725	0
Flt Permitted		0.988								0.950	0.975	
Satd. Flow (perm)	0	5009	0	0	0	0	0	1740	0	1681	1725	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		4										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		196			183			284			287	
Travel Time (s)		4.5			4.2			6.5			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	171	545	15	0	0	0	0	27	26	267	82	0
Shared Lane Traffic (%)										33%		
Lane Group Flow (vph)	0	731	0	0	0	0	0	53	0	179	170	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Split	NA	
Protected Phases		2						4		3	3	
Permitted Phases	2											
Detector Phase	2	2						4		3	3	
Switch Phase												

Lane Group	Ø5	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Growth Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	5	6
Permitted Phases		
Detector Phase		
Switch Phase		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	10.0	10.0						3.0		5.0	5.0	
Minimum Split (s)	14.7	14.7						8.5		10.3	10.3	
Total Split (s)	47.0	47.0						19.0		20.0	20.0	
Total Split (%)	47.0%	47.0%						19.0%		20.0%	20.0%	
Maximum Green (s)	42.3	42.3						13.5		14.7	14.7	
Yellow Time (s)	3.2	3.2						3.0		3.2	3.2	
All-Red Time (s)	1.5	1.5						2.5		2.1	2.1	
Lost Time Adjust (s)		-0.7						0.0		-1.3	-1.5	
Total Lost Time (s)		4.0						5.5		4.0	3.8	
Lead/Lag										Lag	Lag	
Lead-Lag Optimize?										Yes	Yes	
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	Min	Min						None		None	None	
Walk Time (s)	7.0	7.0						4.0				
Flash Dont Walk (s)	27.0	27.0						13.0				
Pedestrian Calls (#/hr)	0	0						0				
Act Effct Green (s)		28.7						6.5		14.0	14.2	
Actuated g/C Ratio		0.29						0.06		0.14	0.14	
v/c Ratio		0.51						0.47		0.76	0.69	
Control Delay		25.3						57.6		47.6	41.0	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		25.3						57.6		47.6	41.0	
LOS		C						E		D	D	
Approach Delay		25.3						57.6			44.4	
Approach LOS		C						E			D	

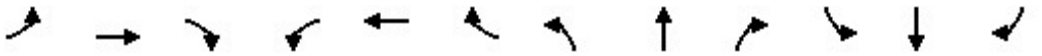
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 10 (10%), Referenced to phase 6:EBT, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 32.7		Intersection LOS: C	
Intersection Capacity Utilization 35.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 48: Bowie St & Market St



Lane Group	Ø5	Ø6
Minimum Initial (s)	1.5	10.0
Minimum Split (s)	7.0	14.7
Total Split (s)	14.0	47.0
Total Split (%)	14%	47%
Maximum Green (s)	8.5	42.3
Yellow Time (s)	3.0	3.2
All-Red Time (s)	2.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	1.0	1.0
Recall Mode	Max	C-Min
Walk Time (s)		7.0
Flash Dont Walk (s)		27.0
Pedestrian Calls (#/hr)		0
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		

Intersection Summary



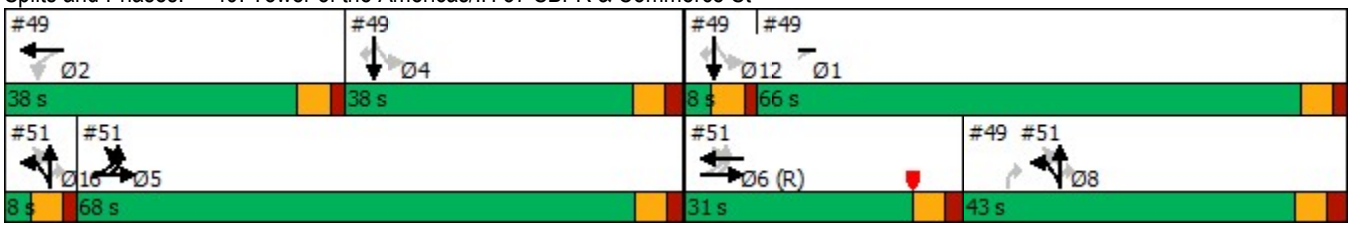
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	89	983	0	0	0	137	104	35	615
Future Volume (vph)	0	0	0	89	983	0	0	0	137	104	35	615
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt									0.865			0.850
Flt Protected					0.996						0.964	
Satd. Flow (prot)	0	0	0	0	3525	0	0	0	1611	0	3412	1583
Flt Permitted					0.996						0.964	
Satd. Flow (perm)	0	0	0	0	3525	0	0	0	1611	0	3412	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)												139
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		635			283			336			353	
Travel Time (s)		14.4			6.4			7.6			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%
Adj. Flow (vph)	0	0	0	113	1250	0	0	0	174	132	45	782
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1363	0	0	0	174	0	177	782
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2				1	1	2	1
Detector Template				Left	Thru				Right	Left	Thru	Right
Leading Detector (ft)				20	100				20	20	100	20
Trailing Detector (ft)				0	0				0	0	0	0
Detector 1 Position(ft)				0	0				0	0	0	0
Detector 1 Size(ft)				20	6				20	20	6	20
Detector 1 Type				Cl+Ex	Cl+Ex				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0				0.0	0.0	0.0	0.0
Detector 1 Queue (s)				0.0	0.0				0.0	0.0	0.0	0.0
Detector 1 Delay (s)				0.0	0.0				0.0	0.0	0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA				Perm	Perm	NA	Perm
Protected Phases					1 2						4 12	
Permitted Phases				1 2					8	4 12		4 12
Detector Phase				1 2	1 2				8	4 12	4 12	4 12
Switch Phase												

Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø12	Ø16
Lane Configurations							
Traffic Volume (vph)							
Future Volume (vph)							
Ideal Flow (vphpl)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Growth Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	12	16
Permitted Phases							
Detector Phase							
Switch Phase							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)									3.0			
Minimum Split (s)									38.0			
Total Split (s)									43.0			
Total Split (%)									28.7%			
Maximum Green (s)									37.0			
Yellow Time (s)									3.6			
All-Red Time (s)									2.4			
Lost Time Adjust (s)									-1.3			
Total Lost Time (s)									4.7			
Lead/Lag									Lag			
Lead-Lag Optimize?									Yes			
Vehicle Extension (s)									3.0			
Recall Mode									None			
Walk Time (s)									7.0			
Flash Dont Walk (s)									14.0			
Pedestrian Calls (#/hr)									0			
Act Effct Green (s)					82.9				37.5		59.1	59.1
Actuated g/C Ratio					0.55				0.25		0.39	0.39
v/c Ratio					0.70				0.43		0.13	1.11
Control Delay					5.0				50.9		30.9	101.5
Queue Delay					0.3				3.0		0.0	0.0
Total Delay					5.3				53.9		30.9	101.5
LOS					A				D		C	F
Approach Delay					5.3			53.9			88.5	
Approach LOS					A			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 6:EBWB, Start of Yellow			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay: 40.6		Intersection LOS: D	
Intersection Capacity Utilization 86.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 49: Tower of the Americas/IH 37 SBFR & Commerce St



Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø12	Ø16
Minimum Initial (s)	3.0	10.0	3.0	3.0	6.0	1.0	1.0
Minimum Split (s)	37.3	38.0	38.0	23.7	23.7	6.1	7.4
Total Split (s)	66.0	38.0	38.0	68.0	31.0	8.0	8.0
Total Split (%)	44%	25%	25%	45%	21%	5%	5%
Maximum Green (s)	60.7	32.7	32.0	62.3	25.3	2.9	2.9
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.7	1.7	2.4	2.1	2.1	1.5	1.5
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	None	None	C-Min	Max	Max
Walk Time (s)		7.0	7.0		7.0		
Flash Dont Walk (s)		7.0	14.0		11.0		
Pedestrian Calls (#/hr)		0	0		0		
Act Effct Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							

Intersection Summary



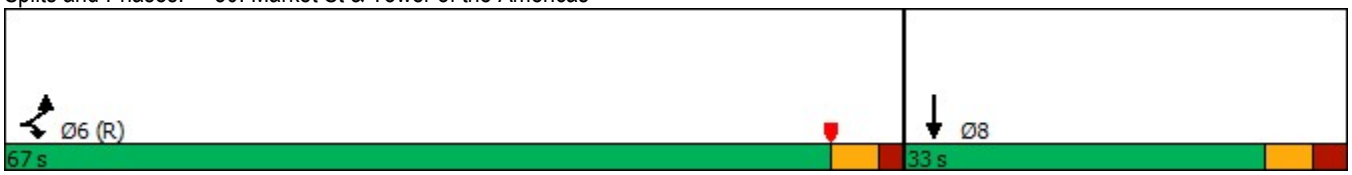
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	138	506	0	0	113	0
Future Volume (vph)	138	506	0	0	113	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1770	2787	0	0	3539	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	2787	0	0	3539	0
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	631			629	336	
Travel Time (s)	14.3			14.3	7.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	177	649	0	0	145	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	177	649	0	0	145	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1			2	
Detector Template	Left	Right			Thru	
Leading Detector (ft)	20	20			100	
Trailing Detector (ft)	0	0			0	
Detector 1 Position(ft)	0	0			0	
Detector 1 Size(ft)	20	20			6	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	
Detector 2 Position(ft)					94	
Detector 2 Size(ft)					6	
Detector 2 Type					Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)					0.0	
Turn Type	Prot	Prot			NA	
Protected Phases	6	6			8	
Permitted Phases						
Detector Phase	6	6			8	
Switch Phase						



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	10.0	10.0			6.0	
Minimum Split (s)	15.6	15.6			27.3	
Total Split (s)	67.0	67.0			33.0	
Total Split (%)	67.0%	67.0%			33.0%	
Maximum Green (s)	61.4	61.4			26.7	
Yellow Time (s)	3.6	3.6			3.6	
All-Red Time (s)	2.0	2.0			2.7	
Lost Time Adjust (s)	-1.6	-1.6			-2.3	
Total Lost Time (s)	4.0	4.0			4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0	1.0			1.0	
Recall Mode	C-Min	C-Min			None	
Walk Time (s)					7.0	
Flash Dont Walk (s)					14.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	81.9	81.9			10.1	
Actuated g/C Ratio	0.82	0.82			0.10	
v/c Ratio	0.12	0.28			0.41	
Control Delay	2.2	2.6			45.3	
Queue Delay	0.0	0.0			0.0	
Total Delay	2.2	2.6			45.3	
LOS	A	A			D	
Approach Delay	2.5				45.3	
Approach LOS	A				D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 6:EBL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 8.9		Intersection LOS: A	
Intersection Capacity Utilization 32.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 50: Market St & Tower of the Americas





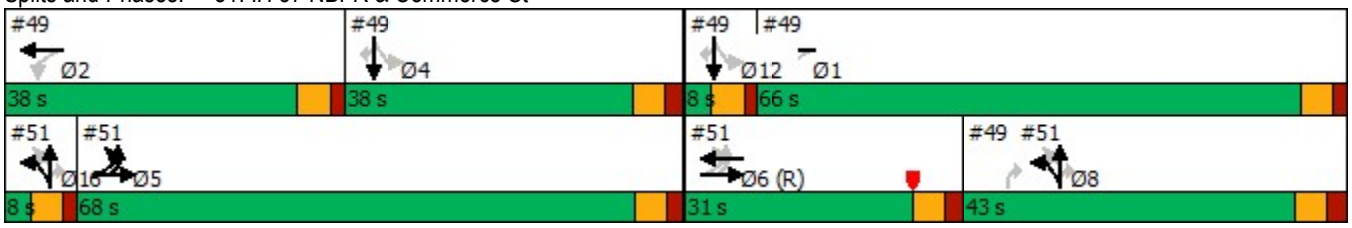
Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR	Ø1	Ø2
Lane Configurations												
Traffic Volume (vph)	46	22	167	367	107	36	604	50	230	184		
Future Volume (vph)	46	22	167	367	107	36	604	50	230	184		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0			100			0		0		
Storage Lanes		1			1			2		1		
Taper Length (ft)		25						25				
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	0.95	0.97	1.00	1.00	1.00		
Frt					0.850					0.850		
Flt Protected		0.950					0.950		0.991			
Satd. Flow (prot)	0	1770	1863	3539	1583	0	3433	0	1846	1583		
Flt Permitted		0.191					0.950		0.991			
Satd. Flow (perm)	0	356	1863	3539	1583	0	3433	0	1846	1583		
Right Turn on Red						Yes				Yes		
Satd. Flow (RTOR)					141					234		
Link Speed (mph)			30	30					30			
Link Distance (ft)			283	712					755			
Travel Time (s)			6.4	16.2					17.2			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%		
Adj. Flow (vph)	59	28	212	467	136	46	768	64	293	234		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	212	467	182	0	768	0	357	234		
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Left	Right	Right	Left	Left	Left	Right		
Median Width(ft)			12	12					24			
Link Offset(ft)			0	0					0			
Crosswalk Width(ft)			16	16					16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15	15			9	9	15	15		9		
Number of Detectors	1	1	2	2	1		1	1	2	1		
Detector Template	Left	Left	Thru	Thru	Right		Left	Left	Thru			
Leading Detector (ft)	20	20	100	100	20		20	20	100	0		
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0		
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0		
Detector 1 Size(ft)	20	20	6	6	20		20	20	6	0		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Detector 2 Position(ft)			94	94					94			
Detector 2 Size(ft)			6	6					6			
Detector 2 Type			Cl+Ex	Cl+Ex					Cl+Ex			
Detector 2 Channel												
Detector 2 Extend (s)			0.0	0.0					0.0			
Turn Type	D.P+P	D.P+P	NA	NA	Perm		Split	Perm	NA	Perm		
Protected Phases	5	5	5 6	6			8 16		8 16		1	2

Lane Group	Ø4	Ø8	Ø12	Ø16
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Growth Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	4	8	12	16

Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR	Ø1	Ø2
Permitted Phases	6	6			6			8 16		8 16		
Detector Phase	5	5	5 6	6	6		8 16	8 16	8 16	8 16		
Switch Phase												
Minimum Initial (s)	3.0	3.0		6.0	6.0						3.0	10.0
Minimum Split (s)	23.7	23.7		23.7	23.7						37.3	38.0
Total Split (s)	68.0	68.0		31.0	31.0						66.0	38.0
Total Split (%)	45.3%	45.3%		20.7%	20.7%						44%	25%
Maximum Green (s)	62.3	62.3		25.3	25.3						60.7	32.7
Yellow Time (s)	3.6	3.6		3.6	3.6						3.6	3.6
All-Red Time (s)	2.1	2.1		2.1	2.1						1.7	1.7
Lost Time Adjust (s)		-1.7		-1.7	-1.7							
Total Lost Time (s)		4.0		4.0	4.0							
Lead/Lag	Lag	Lag		Lead	Lead						Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes						Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0						3.0	3.0
Recall Mode	None	None		C-Min	C-Min						None	Min
Walk Time (s)				7.0	7.0							7.0
Flash Dont Walk (s)				11.0	11.0							7.0
Pedestrian Calls (#/hr)				0	0							0
Act Effct Green (s)		89.8	93.8	25.8	25.8		48.2		48.2	46.2		
Actuated g/C Ratio		0.60	0.63	0.17	0.17		0.32		0.32	0.31		
v/c Ratio		0.11	0.18	0.77	0.47		0.70		0.60	0.36		
Control Delay		21.3	23.2	68.3	18.8		48.8		48.3	6.1		
Queue Delay		0.0	1.8	3.6	0.0		0.0		0.0	0.0		
Total Delay		21.3	25.0	71.9	18.8		48.8		48.3	6.1		
LOS		C	C	E	B		D		D	A		
Approach Delay			23.9	57.0					41.3			
Approach LOS			C	E					D			

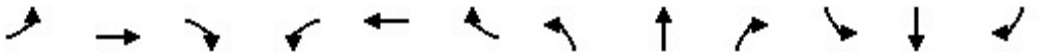
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 6:EBWB, Start of Yellow			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay: 43.5		Intersection LOS: D	
Intersection Capacity Utilization 46.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 51: IH 37 NBFR & Commerce St



Lane Group	Ø4	Ø8	Ø12	Ø16
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	3.0	3.0	1.0	1.0
Minimum Split (s)	38.0	38.0	6.1	7.4
Total Split (s)	38.0	43.0	8.0	8.0
Total Split (%)	25%	29%	5%	5%
Maximum Green (s)	32.0	37.0	2.9	2.9
Yellow Time (s)	3.6	3.6	3.6	3.6
All-Red Time (s)	2.4	2.4	1.5	1.5
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max
Walk Time (s)	7.0	7.0		
Flash Dont Walk (s)	14.0	14.0		
Pedestrian Calls (#/hr)	0	0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary

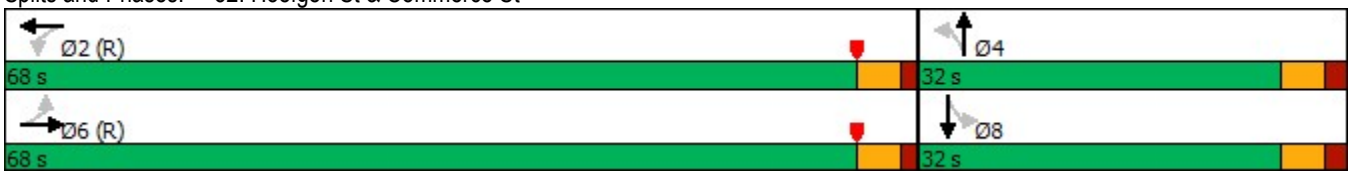


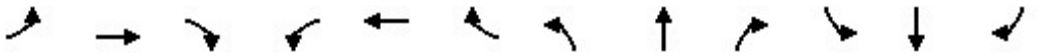
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	283	8	5	425	3	31	2	4	1	1	46
Future Volume (vph)	13	283	8	5	425	3	31	2	4	1	1	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.999			0.906			0.869	
Flt Protected		0.998			0.999		0.950				0.999	
Satd. Flow (prot)	0	3518	0	0	3532	0	1770	1688	0	0	1617	0
Flt Permitted		0.926			0.952		0.712				0.995	
Satd. Flow (perm)	0	3264	0	0	3366	0	1326	1688	0	0	1611	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			1			5			59	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		712			189			421			307	
Travel Time (s)		16.2			4.3			9.6			7.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%
Adj. Flow (vph)	17	360	10	6	540	4	39	3	5	1	1	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	387	0	0	550	0	39	8	0	0	61	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	0	100		0	100		20	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	0	6		0	6		20	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	22.6	22.6		22.6	22.6		25.0	25.0		25.0	25.0	
Total Split (s)	68.0	68.0		68.0	68.0		32.0	32.0		32.0	32.0	
Total Split (%)	68.0%	68.0%		68.0%	68.0%		32.0%	32.0%		32.0%	32.0%	
Maximum Green (s)	63.4	63.4		63.4	63.4		27.0	27.0		27.0	27.0	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.4	1.4		1.4	1.4		1.8	1.8		1.8	1.8	
Lost Time Adjust (s)		-0.6			-0.6		-1.0	-1.0			-1.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		86.9			86.9		8.1	8.1			8.1	
Actuated g/C Ratio		0.87			0.87		0.08	0.08			0.08	
v/c Ratio		0.14			0.19		0.36	0.06			0.33	
Control Delay		1.5			1.6		52.9	30.7			17.3	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		1.5			1.6		52.9	30.7			17.3	
LOS		A			A		D	C			B	
Approach Delay		1.5			1.6			49.1			17.3	
Approach LOS		A			A			D			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 10 (10%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay: 4.6		Intersection LOS: A	
Intersection Capacity Utilization 36.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 52: Hoefgen St & Commerce St





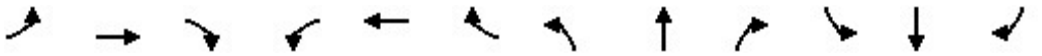
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	229	24	43	352	57	67	253	63	25	125	14
Future Volume (vph)	35	229	24	43	352	57	67	253	63	25	125	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.987			0.981			0.970			0.987	
Flt Protected		0.994			0.995		0.950				0.992	
Satd. Flow (prot)	0	3472	0	0	3455	0	1770	1807	0	0	3465	0
Flt Permitted		0.855			0.889		0.621				0.850	
Satd. Flow (perm)	0	2987	0	0	3087	0	1157	1807	0	0	2969	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			30			30			16	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			236			259			1425	
Travel Time (s)		8.2			5.4			5.9			32.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%
Adj. Flow (vph)	45	291	31	55	448	72	85	322	80	32	159	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	367	0	0	575	0	85	402	0	0	209	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	0	100		0	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	0	6		0	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		D.P+P	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			6			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0		3.0	10.0		10.0	10.0	
Minimum Split (s)	24.7	24.7		24.7	24.7		7.0	24.9		19.9	19.9	
Total Split (s)	26.0	26.0		26.0	26.0		14.0	34.0		20.0	20.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		23.3%	56.7%		33.3%	33.3%	
Maximum Green (s)	21.3	21.3		21.3	21.3		10.0	29.1		15.1	15.1	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.0	3.6		3.6	3.6	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.3		1.3	1.3	
Lost Time Adjust (s)		-0.7			-0.7		0.0	-0.9			-0.9	
Total Lost Time (s)		4.0			4.0		4.0	4.0			4.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0			13.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)		32.3			32.3		16.5	19.7			11.6	
Actuated g/C Ratio		0.54			0.54		0.28	0.33			0.19	
v/c Ratio		0.23			0.34		0.23	0.66			0.36	
Control Delay		8.5			9.2		14.0	20.6			21.2	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		8.5			9.2		14.0	20.6			21.2	
LOS		A			A		B	C			C	
Approach Delay		8.5			9.2			19.4			21.2	
Approach LOS		A			A			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 47 (78%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 13.6		Intersection LOS: B	
Intersection Capacity Utilization 66.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 53: Cherry St & Commerce St



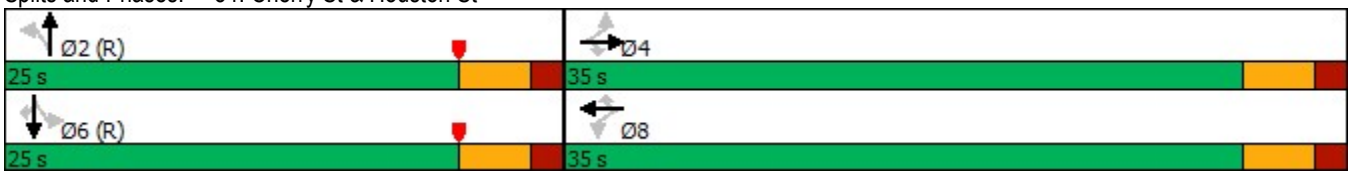


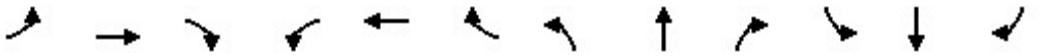
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	89	42	22	100	24	45	227	33	8	156	3
Future Volume (vph)	4	89	42	22	100	24	45	227	33	8	156	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.96		0.99			1.00	0.93
Frt			0.850			0.850		0.984				0.850
Flt Protected		0.998			0.991			0.993			0.998	
Satd. Flow (prot)	0	1859	1583	0	1846	1583	0	3431	0	0	1859	1583
Flt Permitted		0.984			0.921			0.888			0.980	
Satd. Flow (perm)	0	1831	1518	0	1708	1518	0	3052	0	0	1823	1470
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			56			32		24				31
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		480			472			1425			459	
Travel Time (s)		10.9			10.7			32.4			10.4	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	5	119	56	29	134	32	60	303	44	11	209	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	56	0	163	32	0	407	0	0	220	4
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	0	100	0	0	100	20	0	100		0	100	0
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	0	6	0	0	6	20	0	6		0	6	0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8	8	2	2		6	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	22.7	22.7	22.7	22.7	22.7	22.7	21.7	21.7		21.7	21.7	21.7
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	25.0	25.0		25.0	25.0	25.0
Total Split (%)	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	41.7%	41.7%		41.7%	41.7%	41.7%
Maximum Green (s)	30.3	30.3	30.3	30.3	30.3	30.3	20.3	20.3		20.3	20.3	20.3
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2		3.2	3.2	3.2
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	1.5
Lost Time Adjust (s)		-0.7	0.0		-0.7	-0.7		-0.7			-0.7	0.0
Total Lost Time (s)		4.0	4.7		4.0	4.0		4.0			4.0	4.7
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	None	None	None	None	None	C-Min	C-Min		C-Min	C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	10.0	10.0		10.0	10.0	10.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	0
Act Effct Green (s)		12.0	11.3		12.0	12.0		43.7			43.7	43.2
Actuated g/C Ratio		0.20	0.19		0.20	0.20		0.73			0.73	0.72
v/c Ratio		0.34	0.17		0.48	0.10		0.18			0.17	0.00
Control Delay		22.8	7.6		28.1	12.9		2.6			4.3	0.0
Queue Delay		0.0	0.0		0.0	0.0		0.0			0.0	0.0
Total Delay		22.8	7.6		28.1	12.9		2.6			4.3	0.0
LOS		C	A		C	B		A			A	A
Approach Delay		18.1			25.6			2.6			4.3	
Approach LOS		B			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 54 (90%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay: 10.2		Intersection LOS: B	
Intersection Capacity Utilization 53.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 54: Cherry St & Houston St



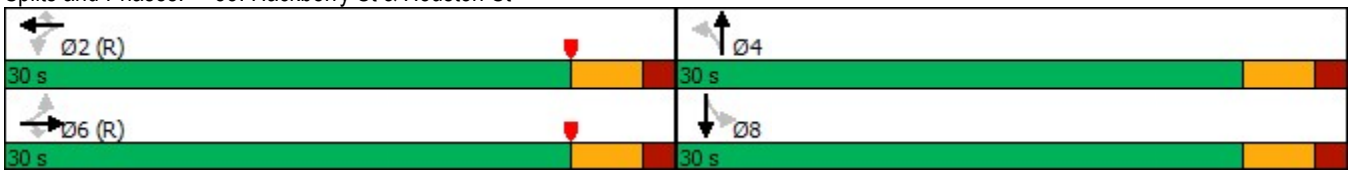


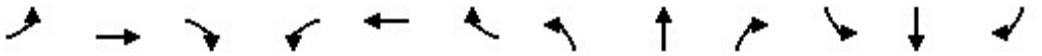
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	109	6	27	120	14	16	194	40	25	89	7
Future Volume (vph)	10	109	6	27	120	14	16	194	40	25	89	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		1.00			1.00	0.96		0.99			0.99	
Frt		0.993				0.850		0.976			0.992	
Flt Protected		0.996			0.991			0.997			0.990	
Satd. Flow (prot)	0	1747	1770	0	1846	1583	0	3405	0	0	3467	0
Flt Permitted		0.980			0.939			0.927			0.817	
Satd. Flow (perm)	0	1715	1770	0	1741	1515	0	3160	0	0	2842	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5				31		46			9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		467			472			521			463	
Travel Time (s)		10.6			10.7			11.8			10.5	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	13	146	8	36	160	19	21	259	53	33	119	9
Shared Lane Traffic (%)			100%									
Lane Group Flow (vph)	0	167	0	0	196	19	0	333	0	0	161	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	0	100	0	0	100	0	0	100		0	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	0	6	0	0	6	0	0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	6.0	6.0		6.0	6.0	
Minimum Split (s)	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7		21.7	21.7	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3		25.3	25.3	
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2		3.2	3.2	
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-0.7	0.0		-0.7	0.0		-0.7			-0.7	
Total Lost Time (s)		4.0	4.7		4.0	4.7		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min	C-Min	C-Min	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	
Act Effct Green (s)		42.2			42.2	41.5		9.8			9.8	
Actuated g/C Ratio		0.70			0.70	0.69		0.16			0.16	
v/c Ratio		0.14			0.16	0.02		0.60			0.34	
Control Delay		1.7			6.0	3.6		24.2			22.2	
Queue Delay		0.0			0.0	0.0		0.0			0.0	
Total Delay		1.7			6.0	3.6		24.2			22.2	
LOS		A			A	A		C			C	
Approach Delay		1.7			5.8			24.2			22.2	
Approach LOS		A			A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 55 (92%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 15.0		Intersection LOS: B	
Intersection Capacity Utilization 64.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 55: Hackberry St & Houston St



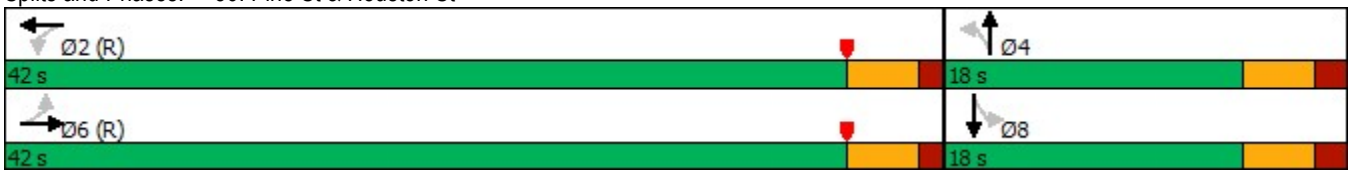


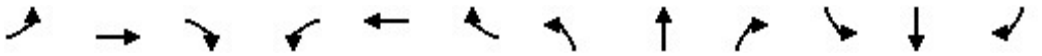
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	145	9	4	150	25	2	48	9	17	40	8
Future Volume (vph)	8	145	9	4	150	25	2	48	9	17	40	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.96	1.00		0.96	0.99			0.98			0.97	
Frt		0.991			0.979			0.979			0.983	
Flt Protected	0.950			0.950				0.998			0.987	
Satd. Flow (prot)	1770	1838	0	1770	1804	0	0	1796	0	0	1787	0
Flt Permitted	0.613			0.629				0.988			0.928	
Satd. Flow (perm)	1095	1838	0	1122	1804	0	0	1774	0	0	1653	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			27			12			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		483			2799			472			467	
Travel Time (s)		11.0			63.6			10.7			10.6	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	11	194	12	5	201	33	3	64	12	23	53	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	206	0	5	234	0	0	79	0	0	87	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	20.4	20.4		20.4	20.4		17.7	17.7		17.7	17.7	
Total Split (s)	42.0	42.0		42.0	42.0		18.0	18.0		18.0	18.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	37.6	37.6		37.6	37.6		13.3	13.3		13.3	13.3	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-0.4	-0.4		-0.4	-0.4			-0.4			-0.4	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.3			4.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	9.0	9.0		9.0	9.0		6.0	6.0		6.0	6.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	47.2	47.2		47.2	47.2			7.5			7.5	
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.12			0.12	
v/c Ratio	0.01	0.14		0.01	0.16			0.34			0.40	
Control Delay	4.7	4.7		2.6	2.5			24.8			27.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	4.7	4.7		2.6	2.5			24.8			27.1	
LOS	A	A		A	A			C			C	
Approach Delay		4.7			2.5			24.8			27.1	
Approach LOS		A			A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 34 (57%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 9.6		Intersection LOS: A	
Intersection Capacity Utilization 31.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 56: Pine St & Houston St



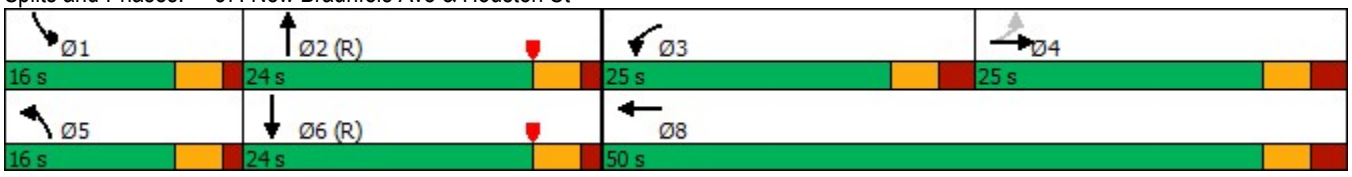


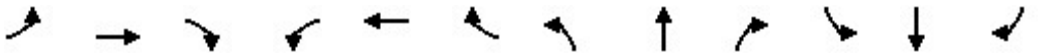
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	82	26	35	102	62	34	477	36	18	299	56
Future Volume (vph)	44	82	26	35	102	62	34	477	36	18	299	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	220		0	220		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.964			0.943			0.990			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1796	0	1770	1757	0	1770	3504	0	1770	3454	0
Flt Permitted	0.621			0.950			0.950			0.950		
Satd. Flow (perm)	1157	1796	0	1770	1757	0	1770	3504	0	1770	3454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			50			8			22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2799			1494			922			669	
Travel Time (s)		63.6			34.0			21.0			15.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	59	110	35	47	136	83	45	638	48	24	400	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	59	145	0	47	219	0	45	686	0	24	475	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases		4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4											
Detector Phase	4	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		3.0	10.0		3.0	10.0	
Minimum Split (s)	10.7	10.7		8.7	10.7		7.6	23.6		7.6	23.6	
Total Split (s)	25.0	25.0		25.0	50.0		16.0	24.0		16.0	24.0	
Total Split (%)	27.8%	27.8%		27.8%	55.6%		17.8%	26.7%		17.8%	26.7%	
Maximum Green (s)	19.3	19.3		19.3	44.3		11.4	19.4		11.4	19.4	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	2.5	2.5		2.5	2.5		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-1.7	-1.7		-1.7	-1.7		-0.6	-0.6		-0.6	-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		0.5	1.0		0.5	2.0		0.5	2.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	3.0	3.0			3.0			7.0			7.0	
Flash Dont Walk (s)	2.0	2.0			2.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0			0			0			0	
Act Effct Green (s)	12.2	12.2		7.1	19.6		5.9	58.3		5.0	55.7	
Actuated g/C Ratio	0.14	0.14		0.08	0.22		0.07	0.65		0.06	0.62	
v/c Ratio	0.38	0.56		0.34	0.52		0.39	0.30		0.25	0.22	
Control Delay	41.3	40.0		43.7	29.1		49.2	10.0		46.3	10.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	41.3	40.0		43.7	29.1		49.2	10.0		46.3	10.4	
LOS	D	D		D	C		D	A		D	B	
Approach Delay		40.4			31.6			12.4			12.1	
Approach LOS		D			C			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 55 (61%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 18.7		Intersection LOS: B	
Intersection Capacity Utilization 48.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 57: New Braunfels Ave & Houston St



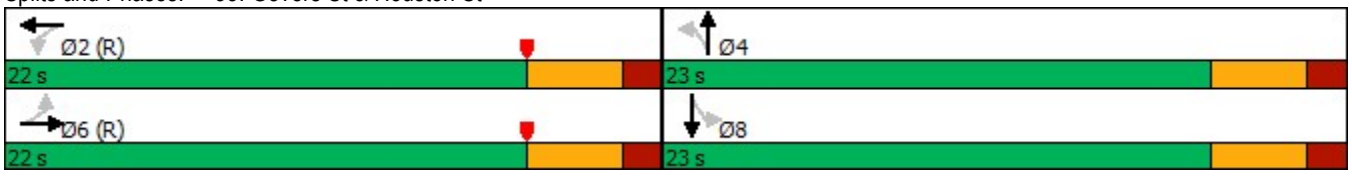


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	127	4	10	163	8	18	43	11	6	36	6
Future Volume (vph)	4	127	4	10	163	8	18	43	11	6	36	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	1.00		0.97	1.00			0.98			0.99	
Frt		0.996			0.993			0.979			0.983	
Flt Protected	0.950			0.950				0.988			0.994	
Satd. Flow (prot)	1770	1852	0	1770	1844	0	0	1786	0	0	1807	0
Flt Permitted	0.616			0.647				0.894			0.964	
Satd. Flow (perm)	1114	1852	0	1168	1844	0	0	1602	0	0	1745	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			7			15			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1494			1426			502			301	
Travel Time (s)		34.0			32.4			11.4			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	5	170	5	13	218	11	24	57	15	8	48	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	175	0	13	229	0	0	96	0	0	64	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		22.6	22.6		22.6	22.6	
Total Split (s)	22.0	22.0		22.0	22.0		23.0	23.0		23.0	23.0	
Total Split (%)	48.9%	48.9%		48.9%	48.9%		51.1%	51.1%		51.1%	51.1%	
Maximum Green (s)	17.5	17.5		17.5	17.5		18.4	18.4		18.4	18.4	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3		1.3	1.3		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-0.5	-0.5		-0.5	-0.5			-0.6			-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	35.5	35.5		35.5	35.5			7.3			7.3	
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.16			0.16	
v/c Ratio	0.01	0.12		0.01	0.16			0.35			0.22	
Control Delay	2.0	1.6		2.0	1.8			18.2			16.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	2.0	1.6		2.0	1.8			18.2			16.4	
LOS	A	A		A	A			B			B	
Approach Delay		1.7			1.8			18.2			16.4	
Approach LOS		A			A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 35 (78%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay: 6.0		Intersection LOS: A	
Intersection Capacity Utilization 33.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 58: Gevers St & Houston St



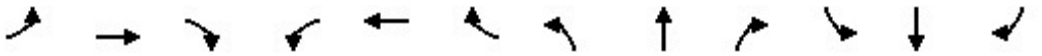
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	113	14	14	161	105	5	361	19	65	369	27
Future Volume (vph)	39	113	14	14	161	105	5	361	19	65	369	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor	0.99	1.00		0.98	0.99			1.00			0.99	
Frt		0.983			0.941			0.993			0.991	
Flt Protected	0.950			0.950				0.999			0.993	
Satd. Flow (prot)	1770	1825	0	1770	1731	0	0	3500	0	0	3470	0
Flt Permitted	0.510			0.650				0.945			0.814	
Satd. Flow (perm)	939	1825	0	1191	1731	0	0	3310	0	0	2836	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			98			13			16	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1426			746			543			299	
Travel Time (s)		32.4			17.0			12.3			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	52	151	19	19	215	140	7	483	25	87	493	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	170	0	19	355	0	0	515	0	0	616	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	24.7	24.7		24.7	24.7		19.8	19.8		19.8	19.8	
Total Split (s)	25.0	25.0		25.0	25.0		20.0	20.0		20.0	20.0	
Total Split (%)	55.6%	55.6%		55.6%	55.6%		44.4%	44.4%		44.4%	44.4%	
Maximum Green (s)	20.3	20.3		20.3	20.3		15.2	15.2		15.2	15.2	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.2	1.2		1.2	1.2	
Lost Time Adjust (s)	-0.7	-0.7		-0.7	-0.7			-0.8			-0.8	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		8.0	8.0		8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	22.3	22.3		22.3	22.3			14.7			14.7	
Actuated g/C Ratio	0.50	0.50		0.50	0.50			0.33			0.33	
v/c Ratio	0.11	0.19		0.03	0.39			0.47			0.66	
Control Delay	11.1	9.7		10.2	10.6			12.7			15.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	11.1	9.7		10.2	10.6			12.7			15.8	
LOS	B	A		B	B			B			B	
Approach Delay		10.1			10.6			12.7			15.8	
Approach LOS		B			B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 5 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 13.0		Intersection LOS: B	
Intersection Capacity Utilization 70.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 59: Walters St & Houston St



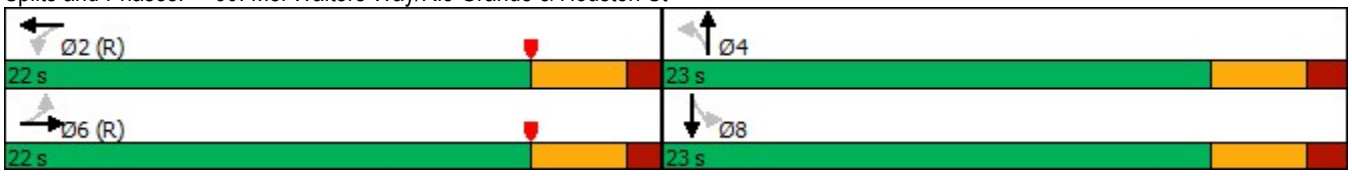


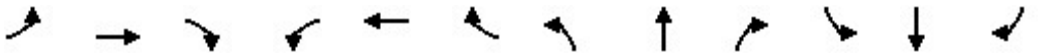
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	155	17	11	218	18	19	41	25	14	32	13
Future Volume (vph)	17	155	17	11	218	18	19	41	25	14	32	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	0.99		0.97	1.00			0.98			0.98	
Frt		0.985			0.989			0.961			0.971	
Flt Protected	0.950			0.950				0.989			0.988	
Satd. Flow (prot)	1770	1824	0	1770	1834	0	0	1741	0	0	1765	0
Flt Permitted	0.569			0.615				0.911			0.925	
Satd. Flow (perm)	1034	1824	0	1113	1834	0	0	1592	0	0	1640	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			11			33			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		799			1332			494			300	
Travel Time (s)		18.2			30.3			11.2			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	23	207	23	15	291	24	25	55	33	19	43	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	230	0	15	315	0	0	113	0	0	79	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	21.4	21.4		21.4	21.4		22.6	22.6		22.6	22.6	
Total Split (s)	22.0	22.0		22.0	22.0		23.0	23.0		23.0	23.0	
Total Split (%)	48.9%	48.9%		48.9%	48.9%		51.1%	51.1%		51.1%	51.1%	
Maximum Green (s)	17.6	17.6		17.6	17.6		18.4	18.4		18.4	18.4	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-0.4	-0.4		-0.4	-0.4			-0.6			-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	32.5	32.5		32.5	32.5			7.5			7.5	
Actuated g/C Ratio	0.72	0.72		0.72	0.72			0.17			0.17	
v/c Ratio	0.03	0.17		0.02	0.24			0.39			0.28	
Control Delay	3.4	3.3		3.3	3.8			16.5			15.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	3.4	3.3		3.3	3.8			16.5			15.8	
LOS	A	A		A	A			B			B	
Approach Delay		3.3			3.8			16.5			15.8	
Approach LOS		A			A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 5 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay: 6.7		Intersection LOS: A	
Intersection Capacity Utilization 36.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 60: Mel Waiters Way/Rio Grande & Houston St



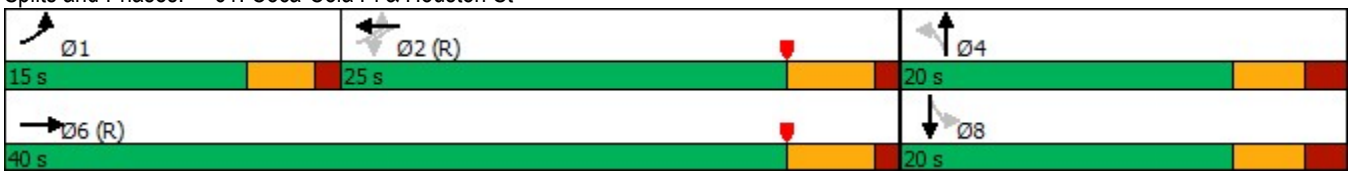


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	230	17	90	295	4	14	4	133	4	4	4
Future Volume (vph)	4	230	17	90	295	4	14	4	133	4	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		0	250		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.990			0.998				0.850		0.950	
Flt Protected	0.950			0.950				0.962			0.984	
Satd. Flow (prot)	1770	3504	0	1770	3532	0	0	1792	1583	0	3308	0
Flt Permitted	0.517			0.552							0.955	
Satd. Flow (perm)	963	3504	0	1028	3532	0	0	1863	1583	0	3211	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23			2				209		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1094			1140			730			346	
Travel Time (s)		24.9			25.9			16.6			7.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	5	308	23	120	394	5	19	5	178	5	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	331	0	120	399	0	0	24	178	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA		Perm	NA		Perm	NA	Free	Perm	NA	
Protected Phases	1	6			2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			2			4		Free	8		
Detector Phase	1	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	7.2	27.1		15.1	15.1		19.2	19.2		19.2	19.2	
Total Split (s)	15.0	40.0		25.0	25.0		20.0	20.0		20.0	20.0	
Total Split (%)	25.0%	66.7%		41.7%	41.7%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	10.8	34.9		19.9	19.9		14.8	14.8		14.8	14.8	
Yellow Time (s)	3.0	3.9		3.9	3.9		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-0.2	-1.1		-1.1	-1.1			-1.2			-1.2	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	0.5	1.5		1.5	1.5		1.0	1.0		1.0	1.0	
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)		7.0					7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0					7.0	7.0		7.0	7.0	
Pedestrian Calls (#/hr)		0					0	0		0	0	
Act Effct Green (s)	52.9	56.9		55.4	55.4			7.2	60.0		7.2	
Actuated g/C Ratio	0.88	0.95		0.92	0.92			0.12	1.00		0.12	
v/c Ratio	0.01	0.10		0.13	0.12			0.11	0.11		0.04	
Control Delay	1.4	0.7		2.4	1.6			24.8	0.1		20.0	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	1.4	0.7		2.4	1.6			24.8	0.1		20.0	
LOS	A	A		A	A			C	A		B	
Approach Delay		0.7			1.8			3.1			20.0	
Approach LOS		A			A			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 40 (67%), Referenced to phase 2:EBWB and 6:EBT, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.13			
Intersection Signal Delay: 2.0		Intersection LOS: A	
Intersection Capacity Utilization 34.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 61: Coca-Cola Pl & Houston St





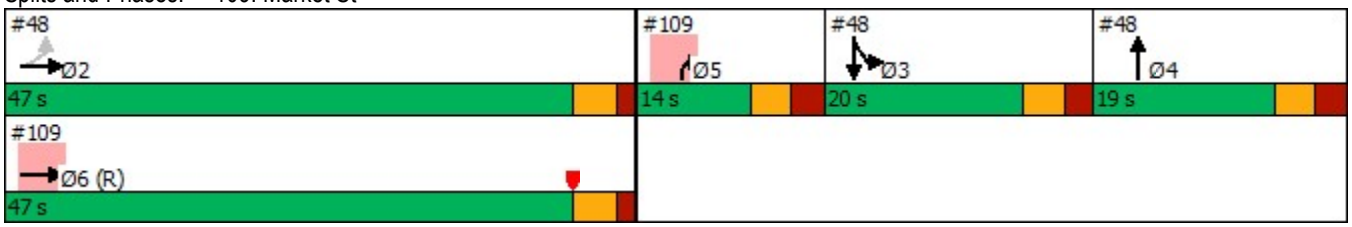
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø3	Ø4
Lane Configurations									
Traffic Volume (vph)	0	0	0	0	0	0			
Future Volume (vph)	0	0	0	0	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Lane Util. Factor	0.91	1.00	1.00	1.00	1.00	1.00			
Frt									
Flt Protected									
Satd. Flow (prot)	5085	0	0	0	0	1863			
Flt Permitted									
Satd. Flow (perm)	5085	0	0	0	0	1863			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)									
Link Speed (mph)	30			30	30				
Link Distance (ft)	183			631	263				
Travel Time (s)	4.2			14.3	6.0				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Growth Factor	118%	118%	118%	118%	118%	118%			
Adj. Flow (vph)	0	0	0	0	0	0			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	0	0	0	0			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	0			0	0				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)		9	15		15	9			
Number of Detectors	2					1			
Detector Template	Thru					Right			
Leading Detector (ft)	100					20			
Trailing Detector (ft)	0					0			
Detector 1 Position(ft)	0					0			
Detector 1 Size(ft)	6					20			
Detector 1 Type	Cl+Ex					Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0					0.0			
Detector 1 Queue (s)	0.0					0.0			
Detector 1 Delay (s)	0.0					0.0			
Detector 2 Position(ft)	94								
Detector 2 Size(ft)	6								
Detector 2 Type	Cl+Ex								
Detector 2 Channel									
Detector 2 Extend (s)	0.0								
Turn Type						Prot			
Protected Phases	6					5	2	3	4
Permitted Phases									
Detector Phase	6					5			
Switch Phase									

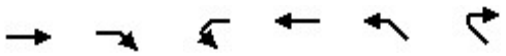


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø3	Ø4
Minimum Initial (s)	10.0					1.5	10.0	5.0	3.0
Minimum Split (s)	14.7					7.0	14.7	10.3	8.5
Total Split (s)	47.0					14.0	47.0	20.0	19.0
Total Split (%)	47.0%					14.0%	47%	20%	19%
Maximum Green (s)	42.3					8.5	42.3	14.7	13.5
Yellow Time (s)	3.2					3.0	3.2	3.2	3.0
All-Red Time (s)	1.5					2.5	1.5	2.1	2.5
Lost Time Adjust (s)	0.0					0.0			
Total Lost Time (s)	4.7					5.5			
Lead/Lag						Lead		Lag	
Lead-Lag Optimize?						Yes		Yes	
Vehicle Extension (s)	1.0					1.0	1.0	1.0	1.0
Recall Mode	C-Min					Max	Min	None	None
Walk Time (s)	7.0						7.0		4.0
Flash Dont Walk (s)	27.0						27.0		13.0
Pedestrian Calls (#/hr)	0						0		0
Act Effct Green (s)									
Actuated g/C Ratio									
v/c Ratio									
Control Delay									
Queue Delay									
Total Delay									
LOS									
Approach Delay									
Approach LOS									

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 10 (10%), Referenced to phase 6:EBT, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 0.0		Intersection LOS: A	
Intersection Capacity Utilization 0.0%		ICU Level of Service A	
Analysis Period (min) 15			

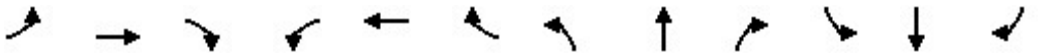
Splits and Phases: 109: Market St





Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	638	0	450	0	0
Future Volume (vph)	0	638	0	450	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	463			1217	1130	
Travel Time (s)	10.5			27.7	25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	693	0	489	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	693	0	489	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.7%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	436	239	203	580	217	308	866	156	199	932	191
Future Volume (vph)	211	436	239	203	580	217	308	866	156	199	932	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	220		220	240		240	230		0	220		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt			0.850			0.850		0.977			0.975	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	4968	0	1770	4958	0
Flt Permitted	0.615			0.615			0.250			0.250		
Satd. Flow (perm)	1146	3539	1583	1146	3539	1583	466	4968	0	466	4958	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			288			261		28			32	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		692			1303			879			693	
Travel Time (s)		15.7			29.6			20.0			15.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	255	526	288	245	700	262	372	1045	188	240	1124	230
Shared Lane Traffic (%)												
Lane Group Flow (vph)	255	526	288	245	700	262	372	1233	0	240	1354	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	6.0	6.0	3.0	6.0	6.0	3.0	10.0		3.0	10.0	
Minimum Split (s)	8.7	33.7	33.7	8.7	37.7	37.7	8.7	37.7		9.0	36.7	
Total Split (s)	24.0	38.0	38.0	26.0	40.0	40.0	28.0	53.0		23.0	48.0	
Total Split (%)	17.1%	27.1%	27.1%	18.6%	28.6%	28.6%	20.0%	37.9%		16.4%	34.3%	
Maximum Green (s)	18.3	32.3	32.3	20.3	34.3	34.3	22.3	47.3		17.3	42.3	
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.6	3.6		3.6	3.6	
All-Red Time (s)	1.8	1.8	1.8	1.8	1.8	1.8	2.1	2.1		2.1	2.1	
Lost Time Adjust (s)	-0.7	-1.7	-1.7	-0.7	-1.7	-1.7	-0.8	-1.7		-0.8	-1.7	
Total Lost Time (s)	5.0	4.0	4.0	5.0	4.0	4.0	4.9	4.0		4.9	4.0	
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Dont Walk (s)		21.0	21.0		25.0	25.0		25.0			24.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	25.7	26.7	26.7	31.6	32.6	32.6	44.2	45.1		41.4	42.3	
Actuated g/C Ratio	0.18	0.19	0.19	0.23	0.23	0.23	0.32	0.32		0.30	0.30	
v/c Ratio	0.86	0.78	0.54	0.66	0.85	0.46	0.91	0.76		0.64	0.89	
Control Delay	81.1	62.2	8.7	54.1	57.7	9.1	70.1	45.3		58.5	53.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	81.1	62.2	8.7	54.1	57.7	9.1	70.1	45.3		58.5	53.8	
LOS	F	E	A	D	E	A	E	D		E	D	
Approach Delay		52.3			46.4			51.1			54.5	
Approach LOS		D			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow, Master Intersection			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 51.3		Intersection LOS: D	
Intersection Capacity Utilization 88.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: Commerce St & General McMullen Dr

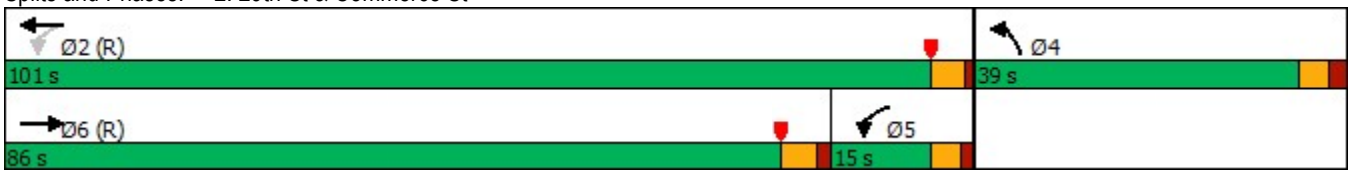


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	686	19	33	1040	8	28
Future Volume (vph)	686	19	33	1040	8	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	150		150	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor					0.94	
Frt	0.996				0.896	
Flt Protected			0.950		0.989	
Satd. Flow (prot)	3525	0	1770	3539	1570	0
Flt Permitted			0.326		0.989	
Satd. Flow (perm)	3525	0	607	3539	1551	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	3				34	
Link Speed (mph)	30			30	30	
Link Distance (ft)	1303			798	530	
Travel Time (s)	29.6			18.1	12.0	
Confl. Peds. (#/hr)					30	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	828	23	40	1255	10	34
Shared Lane Traffic (%)						
Lane Group Flow (vph)	851	0	40	1255	44	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA		pm+pt	NA	Prot	
Protected Phases	6		5	2	4	
Permitted Phases			2			
Detector Phase	6		5	2	4	
Switch Phase						
Minimum Initial (s)	10.0		3.0	10.0	3.0	
Minimum Split (s)	19.1		8.1	15.1	29.3	
Total Split (s)	86.0		15.0	101.0	39.0	
Total Split (%)	61.4%		10.7%	72.1%	27.9%	
Maximum Green (s)	80.9		10.5	96.4	33.7	
Yellow Time (s)	3.6		3.0	3.6	3.2	
All-Red Time (s)	1.5		1.5	1.0	2.1	
Lost Time Adjust (s)	-0.6		-0.5	-0.6	-1.3	
Total Lost Time (s)	4.5		4.0	4.0	4.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	1.0		0.5	1.0	1.0	
Recall Mode	C-Min		None	C-Min	None	
Walk Time (s)	7.0				7.0	
Flash Dont Walk (s)	7.0				17.0	
Pedestrian Calls (#/hr)	0				0	
Act Effct Green (s)	121.7		127.3	128.1	6.4	
Actuated g/C Ratio	0.87		0.91	0.92	0.05	
v/c Ratio	0.28		0.07	0.39	0.42	
Control Delay	1.3		2.4	5.6	38.3	
Queue Delay	0.0		0.0	0.1	0.0	
Total Delay	1.3		2.4	5.7	38.3	
LOS	A		A	A	D	
Approach Delay	1.3			5.6	38.3	
Approach LOS	A			A	D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 44 (31%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 4.6		Intersection LOS: A	
Intersection Capacity Utilization 52.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: 29th St & Commerce St

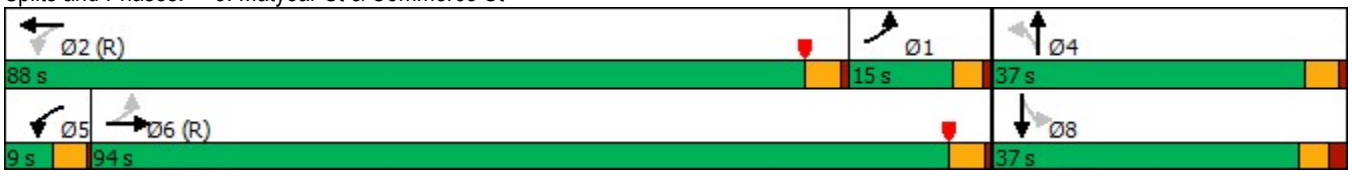


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	730	12	6	1017	11	5	10	5	33	4	57
Future Volume (vph)	14	730	12	6	1017	11	5	10	5	33	4	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		0	150		0	0		0	150		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor								0.97		0.95	0.94	
Frt		0.998			0.998			0.966			0.860	
Flt Protected	0.950			0.950				0.988		0.950		
Satd. Flow (prot)	1770	3532	0	1770	3532	0	0	1751	0	1770	1510	0
Flt Permitted	0.219			0.299				0.916		0.875		
Satd. Flow (perm)	408	3532	0	557	3532	0	0	1605	0	1551	1510	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			1			6			69	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		798			1731			484			302	
Travel Time (s)		18.1			39.3			11.0			6.9	
Confl. Peds. (#/hr)							30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	17	881	14	7	1227	13	6	12	6	40	5	69
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	895	0	7	1240	0	0	24	0	40	74	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0		5.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	8.1	36.6		9.0	18.6		29.6	29.6		30.3	30.3	
Total Split (s)	15.0	94.0		9.0	88.0		37.0	37.0		37.0	37.0	
Total Split (%)	10.7%	67.1%		6.4%	62.9%		26.4%	26.4%		26.4%	26.4%	
Maximum Green (s)	10.8	89.4		5.0	83.4		32.4	32.4		31.7	31.7	
Yellow Time (s)	3.0	3.6		3.5	3.6		3.6	3.6		3.2	3.2	
All-Red Time (s)	1.2	1.0		0.5	1.0		1.0	1.0		2.1	2.1	
Lost Time Adjust (s)	-0.2	-0.6		-0.6	-0.6			-1.3		-1.3	-1.3	
Total Lost Time (s)	4.0	4.0		3.4	4.0			3.3		4.0	4.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	1.0	1.0		3.0	1.0		1.0	1.0		1.0	1.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		7.0			7.0		18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	125.1	123.8		122.5	122.7			9.9		9.3	9.3	
Actuated g/C Ratio	0.89	0.88		0.88	0.88			0.07		0.07	0.07	
v/c Ratio	0.04	0.29		0.01	0.40			0.20		0.39	0.45	
Control Delay	4.4	5.4		5.3	8.9			52.5		72.8	24.0	
Queue Delay	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Delay	4.4	5.4		5.3	8.9			52.5		72.8	24.0	
LOS	A	A		A	A			D		E	C	
Approach Delay		5.3			8.9			52.5			41.2	
Approach LOS		A			A			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay: 9.5		Intersection LOS: A	
Intersection Capacity Utilization 53.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Matyear St & Commerce St



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	410	101	200	759	100	150	209	118	28	126	83
Future Volume (vph)	210	410	101	200	759	100	150	209	118	28	126	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	150		0	150		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99		0.98	0.99		0.97	0.98		0.97	0.97	
Frt		0.970			0.982			0.946			0.940	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3388	0	1770	3447	0	1770	3266	0	1770	3240	0
Flt Permitted	0.170			0.340			0.606			0.606		
Satd. Flow (perm)	317	3388	0	623	3447	0	1094	3266	0	1091	3240	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			11			74			100	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1731			463			490			331	
Travel Time (s)		39.3			10.5			11.1			7.5	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	253	495	122	241	916	121	181	252	142	34	152	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	253	617	0	241	1037	0	181	394	0	34	252	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

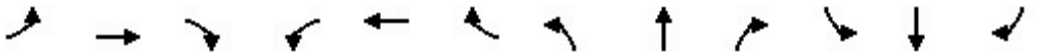
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0		3.0	6.0		3.0	6.0	
Minimum Split (s)	8.2	28.2		8.2	26.2		8.5	27.5		8.5	28.5	
Total Split (s)	28.0	60.0		21.0	53.0		21.0	38.0		21.0	38.0	
Total Split (%)	20.0%	42.9%		15.0%	37.9%		15.0%	27.1%		15.0%	27.1%	
Maximum Green (s)	22.8	54.8		15.8	47.8		15.5	32.5		15.5	32.5	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.6	1.6		1.6	1.6		1.9	1.9		1.9	1.9	
Lost Time Adjust (s)	0.0	-1.1		0.0	-1.1		0.0	-1.1		0.0	-1.1	
Total Lost Time (s)	5.2	4.1		5.2	4.1		5.5	4.4		5.5	4.4	
Lead/Lag	Lag	Lead		Lag	Lead		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	0.5	1.0		0.5	1.0		0.5	1.0		0.5	1.0	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		16.0			14.0			15.0			16.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	81.5	65.9		97.9	77.2		22.3	23.3		10.4	11.4	
Actuated g/C Ratio	0.58	0.47		0.70	0.55		0.16	0.17		0.07	0.08	
v/c Ratio	0.71	0.38		0.36	0.54		0.73	0.65		0.29	0.71	
Control Delay	40.5	31.7		14.1	23.2		73.1	49.8		66.7	48.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	40.5	31.7		14.1	23.2		73.1	49.8		66.7	48.3	
LOS	D	C		B	C		E	D		E	D	
Approach Delay		34.2			21.5			57.2			50.5	
Approach LOS		C			C			E			D	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 113 (81%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.73
Intersection Signal Delay: 34.7 Intersection LOS: C
Intersection Capacity Utilization 80.3% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 4: 24th St & Commerce St





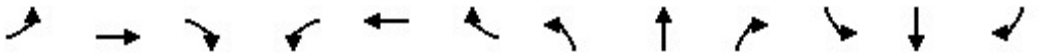
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	62	1019	23	48	44	0	0	49	23
Future Volume (vph)	0	0	0	62	1019	23	48	44	0	0	49	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		130	150		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00	0.92						
Frt						0.850					0.957	
Flt Protected					0.997		0.950					
Satd. Flow (prot)	0	0	0	0	3529	1583	1770	1863	0	0	1783	0
Flt Permitted					0.997		0.701					
Satd. Flow (perm)	0	0	0	0	3516	1455	1306	1863	0	0	1783	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						28					28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		383			1482			392			323	
Travel Time (s)		8.7			33.7			8.9			7.3	
Confl. Peds. (#/hr)				30		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	75	1229	28	58	53	0	0	59	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1304	28	58	53	0	0	87	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				22.8	22.8	22.8	20.6	20.6			20.6	
Total Split (s)				53.0	53.0	53.0	22.0	22.0			22.0	
Total Split (%)				70.7%	70.7%	70.7%	29.3%	29.3%			29.3%	
Maximum Green (s)				48.2	48.2	48.2	17.4	17.4			17.4	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.8	-0.8	-0.6	-0.6			-0.6	
Total Lost Time (s)					4.0	4.0	4.0	4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)				11.0	11.0	11.0	9.0	9.0			9.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)					49.0	49.0	18.0	18.0			18.0	
Actuated g/C Ratio					0.65	0.65	0.24	0.24			0.24	
v/c Ratio					0.57	0.03	0.19	0.12			0.19	
Control Delay					8.4	2.0	24.6	23.2			17.8	
Queue Delay					0.0	0.0	0.0	0.0			0.0	
Total Delay					8.4	2.0	24.6	23.2			17.8	
LOS					A	A	C	C			B	
Approach Delay					8.2			23.9			17.8	
Approach LOS					A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 13 (17%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 9.9		Intersection LOS: A	
Intersection Capacity Utilization 49.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: 19th St & Commerce St



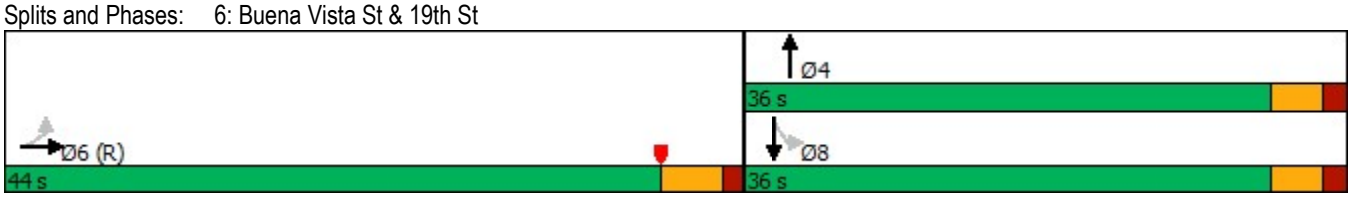


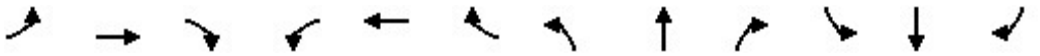
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	444	34	0	0	0	0	79	29	23	86	0
Future Volume (vph)	15	444	34	0	0	0	0	79	29	23	86	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	150		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00										
Frt		0.990						0.964				
Flt Protected		0.998									0.989	
Satd. Flow (prot)	0	3497	0	0	0	0	0	1796	0	0	1842	0
Flt Permitted		0.998									0.931	
Satd. Flow (perm)	0	3494	0	0	0	0	0	1796	0	0	1734	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13						27				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		532			1485			389			392	
Travel Time (s)		12.1			33.8			8.8			8.9	
Confl. Peds. (#/hr)	30											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	19	550	42	0	0	0	0	98	36	29	107	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	611	0	0	0	0	0	134	0	0	136	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	0	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	0	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	14.9	14.9						10.7		10.7	10.7	
Total Split (s)	44.0	44.0						36.0		36.0	36.0	
Total Split (%)	55.0%	55.0%						45.0%		45.0%	45.0%	
Maximum Green (s)	39.1	39.1						31.3		31.3	31.3	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3						1.5		1.5	1.5	
Lost Time Adjust (s)		-0.8						-0.6			-0.6	
Total Lost Time (s)		4.1						4.1			4.1	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Act Effct Green (s)		39.9						31.9			31.9	
Actuated g/C Ratio		0.50						0.40			0.40	
v/c Ratio		0.35						0.18			0.20	
Control Delay		12.6						13.2			16.7	
Queue Delay		0.0						0.0			0.0	
Total Delay		12.6						13.2			16.7	
LOS		B						B			B	
Approach Delay		12.6						13.2			16.7	
Approach LOS		B						B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 16 (20%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay: 13.3		Intersection LOS: B	
Intersection Capacity Utilization 39.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: Buena Vista St & 19th St



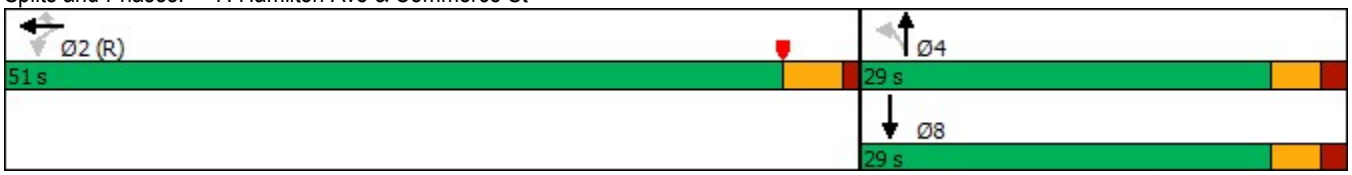


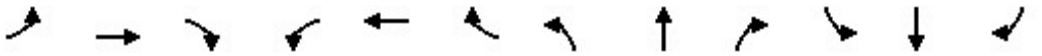
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	60	1051	36	33	80	0	0	67	19
Future Volume (vph)	0	0	0	60	1051	36	33	80	0	0	67	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		130	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.970	
Flt Protected					0.997			0.986				
Satd. Flow (prot)	0	0	0	0	3529	1583	0	1837	0	0	1807	0
Flt Permitted					0.997			0.902				
Satd. Flow (perm)	0	0	0	0	3529	1583	0	1680	0	0	1807	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						41					19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1482			1455			390			326	
Travel Time (s)		33.7			33.1			8.9			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	72	1268	43	40	97	0	0	81	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1340	43	0	137	0	0	104	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				9.9	9.9	9.9	6.0	6.0			6.0	
Minimum Split (s)				14.7	14.7	14.7	10.7	10.7			10.7	
Total Split (s)				51.0	51.0	51.0	29.0	29.0			29.0	
Total Split (%)				63.8%	63.8%	63.8%	36.3%	36.3%			36.3%	
Maximum Green (s)				46.3	46.3	46.3	24.3	24.3			24.3	
Yellow Time (s)				3.6	3.6	3.6	3.0	3.0			3.0	
All-Red Time (s)				1.1	1.1	1.1	1.7	1.7			1.7	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					3.9	3.9		4.1			4.1	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Act Effct Green (s)					47.1	47.1		24.9			24.9	
Actuated g/C Ratio					0.59	0.59		0.31			0.31	
v/c Ratio					0.65	0.05		0.26			0.18	
Control Delay					4.7	0.1		22.4			17.5	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					4.7	0.1		22.4			17.5	
LOS					A	A		C			B	
Approach Delay					4.5			22.4			17.5	
Approach LOS					A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 75 (94%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 6.9		Intersection LOS: A	
Intersection Capacity Utilization 54.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Hamilton Ave & Commerce St



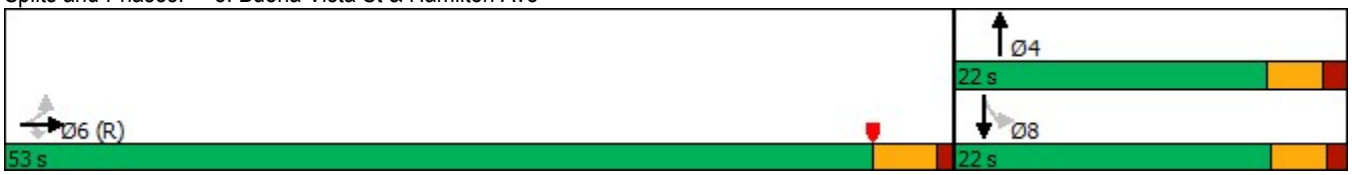


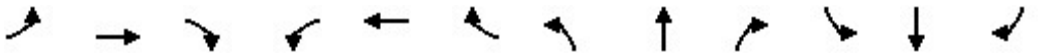
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	474	34	0	0	0	0	64	61	7	33	0
Future Volume (vph)	13	474	34	0	0	0	0	64	61	7	33	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850					0.934				
Flt Protected		0.999									0.991	
Satd. Flow (prot)	0	3536	1583	0	0	0	0	1740	0	0	1846	0
Flt Permitted		0.999									0.926	
Satd. Flow (perm)	0	3536	1583	0	0	0	0	1740	0	0	1725	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			42					61				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1485			1450			392			390	
Travel Time (s)		33.8			33.0			8.9			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	16	587	42	0	0	0	0	79	76	9	41	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	603	42	0	0	0	0	155	0	0	50	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1					2		1	2	
Detector Template	Left	Left	Right					Thru		Left	Thru	
Leading Detector (ft)	0	20	20					100		0	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	0	20	20					6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	6		6							8		
Detector Phase	6	6	6					4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					6.0		6.0	6.0	
Minimum Split (s)	14.6	14.6	14.6					10.6		10.4	10.4	
Total Split (s)	53.0	53.0	53.0					22.0		22.0	22.0	
Total Split (%)	70.7%	70.7%	70.7%					29.3%		29.3%	29.3%	
Maximum Green (s)	48.4	48.4	48.4					17.4		17.6	17.6	
Yellow Time (s)	3.6	3.6	3.6					3.2		3.2	3.2	
All-Red Time (s)	1.0	1.0	1.0					1.4		1.2	1.2	
Lost Time Adjust (s)		-0.6	-0.6					-0.6			-0.4	
Total Lost Time (s)		4.0	4.0					4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	C-Min	C-Min	C-Min					None		None	None	
Act Effct Green (s)		58.0	58.0					9.0			9.0	
Actuated g/C Ratio		0.77	0.77					0.12			0.12	
v/c Ratio		0.22	0.03					0.59			0.24	
Control Delay		2.8	1.1					28.6			31.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		2.8	1.1					28.6			31.7	
LOS		A	A					C			C	
Approach Delay		2.7						28.6			31.7	
Approach LOS		A						C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 2 (3%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 9.1		Intersection LOS: A	
Intersection Capacity Utilization 30.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: Buena Vista St & Hamilton Ave





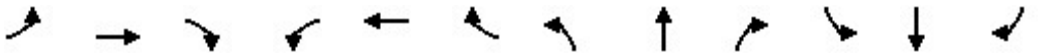
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	170	979	185	104	707	0	0	569	122
Future Volume (vph)	0	0	0	170	979	185	104	707	0	0	569	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor					1.00	0.97						
Frt						0.850					0.974	
Flt Protected					0.993			0.994				
Satd. Flow (prot)	0	0	0	0	3514	1583	0	3518	0	0	3447	0
Flt Permitted					0.993			0.663				
Satd. Flow (perm)	0	0	0	0	3503	1530	0	2346	0	0	3447	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						70					17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1455			747			389			155	
Travel Time (s)		33.1			17.0			8.8			3.5	
Confl. Peds. (#/hr)				30		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	205	1181	223	125	853	0	0	687	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1386	223	0	978	0	0	834	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2					
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				6.0	6.0	6.0	9.9	9.9			9.9	
Minimum Split (s)				11.0	11.0	11.0	14.7	14.7			14.7	
Total Split (s)				37.0	37.0	37.0	43.0	43.0			43.0	
Total Split (%)				46.3%	46.3%	46.3%	53.8%	53.8%			53.8%	
Maximum Green (s)				32.0	32.0	32.0	38.3	38.3			38.3	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.4	1.4	1.4	1.5	1.5			1.5	
Lost Time Adjust (s)					-0.8	-0.8		-0.8			-0.8	
Total Lost Time (s)					4.2	4.2		3.9			3.9	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0	2.0	1.0	1.0			1.0	
Recall Mode				None	None	None	C-Min	C-Min			C-Min	
Act Effct Green (s)					33.9	33.9		38.0			38.0	
Actuated g/C Ratio					0.42	0.42		0.48			0.48	
v/c Ratio					0.94	0.32		0.88			0.51	
Control Delay					47.0	22.4		31.8			15.3	
Queue Delay					0.0	0.0		0.9			0.0	
Total Delay					47.0	22.4		32.7			15.3	
LOS					D	C		C			B	
Approach Delay					43.6			32.7			15.3	
Approach LOS					D			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 75 (94%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 33.6		Intersection LOS: C	
Intersection Capacity Utilization 92.5%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 9: Zarzamora St & Commerce St



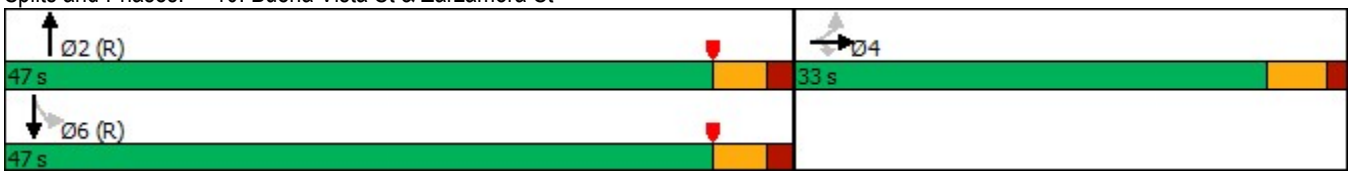


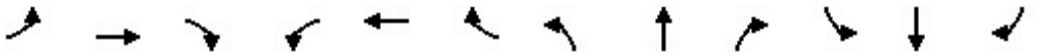
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	366	85	0	0	0	0	533	74	71	601	0
Future Volume (vph)	106	366	85	0	0	0	0	533	74	71	601	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00
Ped Bike Factor		0.99	0.96									
Frt			0.850					0.982				
Flt Protected		0.989									0.995	
Satd. Flow (prot)	0	3500	1583	0	0	0	0	3476	0	0	3522	0
Flt Permitted		0.989									0.791	
Satd. Flow (perm)	0	3480	1525	0	0	0	0	3476	0	0	2800	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			105					29				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1450			753			394			389	
Travel Time (s)		33.0			17.1			9.0			8.8	
Confl. Peds. (#/hr)	30		30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	131	454	105	0	0	0	0	660	92	88	745	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	585	105	0	0	0	0	752	0	0	833	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	0	100	20					100		0	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	0	6	20					6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4		4							6		
Detector Phase	4	4	4					2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0					10.0		10.0	10.0	
Minimum Split (s)	10.9	10.9	10.9					14.8		14.8	14.8	
Total Split (s)	33.0	33.0	33.0					47.0		47.0	47.0	
Total Split (%)	41.3%	41.3%	41.3%					58.8%		58.8%	58.8%	
Maximum Green (s)	28.1	28.1	28.1					42.2		42.2	42.2	
Yellow Time (s)	3.6	3.6	3.6					3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3	1.3					1.6		1.6	1.6	
Lost Time Adjust (s)		-0.4	-0.4					-0.6			-0.6	
Total Lost Time (s)		4.5	4.5					4.2			4.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	None	None	None					C-Min		C-Min	C-Min	
Act Effct Green (s)		17.9	17.9					53.4			53.4	
Actuated g/C Ratio		0.22	0.22					0.67			0.67	
v/c Ratio		0.75	0.25					0.32			0.45	
Control Delay		35.2	6.6					6.3			7.6	
Queue Delay		0.0	0.0					0.0			0.2	
Total Delay		35.2	6.6					6.4			7.8	
LOS		D	A					A			A	
Approach Delay		30.8						6.4			7.8	
Approach LOS		C						A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 14.3		Intersection LOS: B	
Intersection Capacity Utilization 66.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 10: Buena Vista St & Zarzamora St





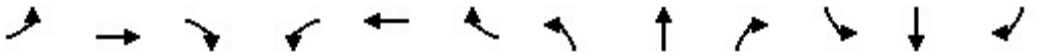
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	19	1121	169	26	55	0	0	61	68
Future Volume (vph)	0	0	0	19	1121	169	26	55	0	0	61	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected					0.999			0.984				
Satd. Flow (prot)	0	0	0	0	3536	1583	0	1833	0	0	1863	1583
Flt Permitted					0.999			0.865				
Satd. Flow (perm)	0	0	0	0	3536	1583	0	1611	0	0	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						191						36
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		747			708			395			185	
Travel Time (s)		17.0			16.1			9.0			4.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	23	1353	204	31	66	0	0	74	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1376	204	0	97	0	0	74	82
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				0	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				0	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	Perm
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2		2	4					8
Detector Phase				2	2	2	4	4			8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	6.0
Minimum Split (s)				15.0	15.0	15.0	10.8	10.8			10.8	10.8
Total Split (s)				47.0	47.0	47.0	33.0	33.0			33.0	33.0
Total Split (%)				58.8%	58.8%	58.8%	41.3%	41.3%			41.3%	41.3%
Maximum Green (s)				42.0	42.0	42.0	28.2	28.2			28.2	28.2
Yellow Time (s)				3.6	3.6	3.6	3.0	3.0			3.0	3.0
All-Red Time (s)				1.4	1.4	1.4	1.8	1.8			1.8	1.8
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	-0.6
Total Lost Time (s)					4.2	4.2		4.2			4.2	4.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	1.0
Recall Mode				C-Min	C-Min	C-Min	None	None			None	None
Act Effct Green (s)					65.6	65.6		9.0			9.0	9.0
Actuated g/C Ratio					0.82	0.82		0.11			0.11	0.11
v/c Ratio					0.47	0.15		0.54			0.35	0.39
Control Delay					1.6	0.2		45.8			36.7	25.6
Queue Delay					0.0	0.0		0.0			0.0	0.0
Total Delay					1.6	0.2		45.8			36.7	25.6
LOS					A	A		D			D	C
Approach Delay					1.4			45.8			30.8	
Approach LOS					A			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 66 (83%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 6.3		Intersection LOS: A	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

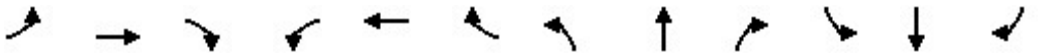
Splits and Phases: 11: Calaveras St & Commerce St





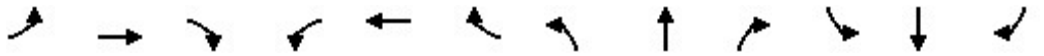
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	489	5	0	0	0	0	17	10	37	19	0
Future Volume (vph)	33	489	5	0	0	0	0	17	10	37	19	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.951				
Flt Protected		0.997									0.968	
Satd. Flow (prot)	0	3525	0	0	0	0	0	1771	0	0	1803	0
Flt Permitted		0.997									0.968	
Satd. Flow (perm)	0	3525	0	0	0	0	0	1771	0	0	1803	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		753			703			212			395	
Travel Time (s)		17.1			16.0			4.8			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	41	606	6	0	0	0	0	21	12	46	24	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	653	0	0	0	0	0	33	0	0	70	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	12	1269	9	9	7	0	0	10	9
Future Volume (vph)	0	0	0	12	1269	9	9	7	0	0	10	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.999						0.935	
Flt Protected								0.972				
Satd. Flow (prot)	0	0	0	0	3536	0	0	1811	0	0	1742	0
Flt Permitted								0.972				
Satd. Flow (perm)	0	0	0	0	3536	0	0	1811	0	0	1742	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		708			1095			391			285	
Travel Time (s)		16.1			24.9			8.9			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	14	1531	11	11	8	0	0	12	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1556	0	0	19	0	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.9%		ICU Level of Service A	
Analysis Period (min) 15			

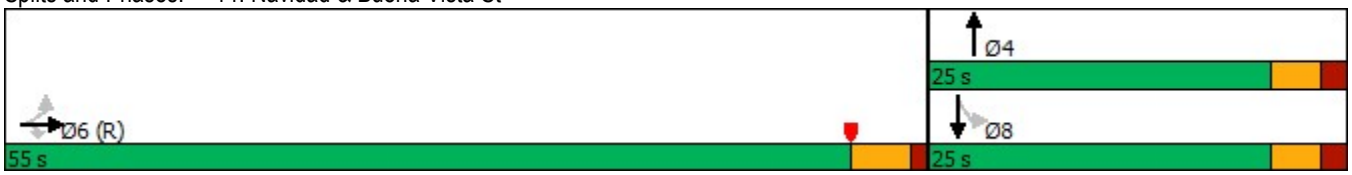


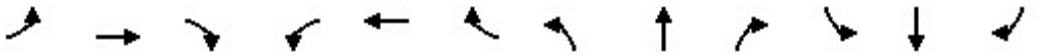
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	523	7	0	0	0	0	8	9	10	11	0
Future Volume (vph)	5	523	7	0	0	0	0	8	9	10	11	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		130	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850					0.929				
Flt Protected											0.977	
Satd. Flow (prot)	0	3539	1583	0	0	0	0	1730	0	0	1820	0
Flt Permitted											0.916	
Satd. Flow (perm)	0	3539	1583	0	0	0	0	1730	0	0	1706	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			23					11				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		703			1448			392			391	
Travel Time (s)		16.0			32.9			8.9			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	6	648	9	0	0	0	0	10	11	12	14	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	654	9	0	0	0	0	21	0	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	0	100	20					100		0	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	0	6	20					6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	6		6							8		
Detector Phase	6	6	6					4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					6.0		6.0	6.0	
Minimum Split (s)	14.7	14.7	14.7					10.7		10.7	10.7	
Total Split (s)	55.0	55.0	55.0					25.0		25.0	25.0	
Total Split (%)	68.8%	68.8%	68.8%					31.3%		31.3%	31.3%	
Maximum Green (s)	50.3	50.3	50.3					20.3		20.3	20.3	
Yellow Time (s)	3.6	3.6	3.6					3.0		3.0	3.0	
All-Red Time (s)	1.1	1.1	1.1					1.7		1.7	1.7	
Lost Time Adjust (s)		-0.6	-0.6					-0.5			-0.5	
Total Lost Time (s)		4.1	4.1					4.2			4.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	C-Max	C-Max	C-Max					Max		Max	Max	
Act Effct Green (s)		50.9	50.9					20.8			20.8	
Actuated g/C Ratio		0.64	0.64					0.26			0.26	
v/c Ratio		0.29	0.01					0.05			0.06	
Control Delay		15.2	5.0					15.6			19.5	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		15.2	5.0					15.6			19.5	
LOS		B	A					B			B	
Approach Delay		15.1						15.6			19.5	
Approach LOS		B						B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 10 (13%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay: 15.2		Intersection LOS: B	
Intersection Capacity Utilization 31.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 14: Navidad & Buena Vista St





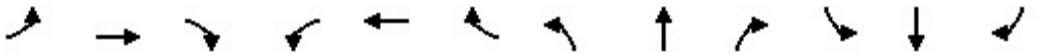
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	69	1174	22	105	57	0	0	55	11
Future Volume (vph)	0	0	0	69	1174	22	105	57	0	0	55	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		130	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.978	
Flt Protected					0.997			0.969				
Satd. Flow (prot)	0	0	0	0	3529	1583	0	1805	0	0	1822	0
Flt Permitted					0.997			0.770				
Satd. Flow (perm)	0	0	0	0	3529	1583	0	1434	0	0	1822	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						25					13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			1095			394			321	
Travel Time (s)		8.0			24.9			9.0			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	83	1416	27	127	69	0	0	66	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1499	27	0	196	0	0	79	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				23.0	23.0	23.0	22.8	22.8			10.8	
Total Split (s)				44.0	44.0	44.0	36.0	36.0			36.0	
Total Split (%)				55.0%	55.0%	55.0%	45.0%	45.0%			45.0%	
Maximum Green (s)				39.0	39.0	39.0	31.2	31.2			31.2	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.4	1.4	1.4	1.6	1.6			1.6	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					4.2	4.2		4.2			4.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0				
Flash Dont Walk (s)				11.0	11.0	11.0	11.0	11.0				
Pedestrian Calls (#/hr)				0	0	0	0	0				
Act Effct Green (s)					39.8	39.8		31.8			31.8	
Actuated g/C Ratio					0.50	0.50		0.40			0.40	
v/c Ratio					0.85	0.03		0.34			0.11	
Control Delay					11.9	0.8		12.3			13.5	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					11.9	0.8		12.3			13.5	
LOS					B	A		B			B	
Approach Delay					11.7			12.3			13.5	
Approach LOS					B			B			B	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 5 (6%), Referenced to phase 2:WBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 11.8	Intersection LOS: B
Intersection Capacity Utilization 61.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 15: Trinity St & Commerce St



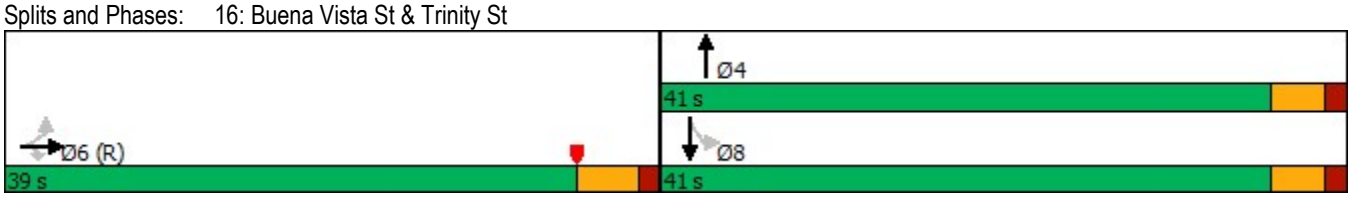


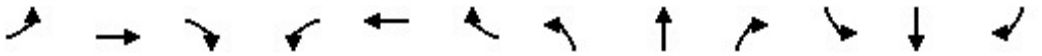
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	497	64	0	0	0	0	103	23	13	85	0
Future Volume (vph)	9	497	64	0	0	0	0	103	23	13	85	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		130	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95									
Frt			0.850					0.975				
Flt Protected		0.999									0.993	
Satd. Flow (prot)	0	3536	1583	0	0	0	0	1816	0	0	1850	0
Flt Permitted		0.999									0.919	
Satd. Flow (perm)	0	3536	1498	0	0	0	0	1816	0	0	1712	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			79					19				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1448			1104			389			394	
Travel Time (s)		32.9			25.1			8.8			9.0	
Confl. Peds. (#/hr)			30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	11	616	79	0	0	0	0	128	29	16	105	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	627	79	0	0	0	0	157	0	0	121	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	0	100	20					100		0	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	0	6	20					6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Detector Phase	6	6	6					4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					5.4		6.0	6.0	
Minimum Split (s)	15.1	15.1	15.1					10.7		10.7	10.7	
Total Split (s)	39.0	39.0	39.0					41.0		41.0	41.0	
Total Split (%)	48.8%	48.8%	48.8%					51.3%		51.3%	51.3%	
Maximum Green (s)	34.1	34.1	34.1					36.4		36.4	36.4	
Yellow Time (s)	3.6	3.6	3.6					3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3	1.3					1.4		1.4	1.4	
Lost Time Adjust (s)		-0.9	-0.9					-0.6			-0.6	
Total Lost Time (s)		4.0	4.0					4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	C-Max	C-Max	C-Max					None		None	None	
Act Effct Green (s)		61.4	61.4					10.6			10.6	
Actuated g/C Ratio		0.77	0.77					0.13			0.13	
v/c Ratio		0.23	0.07					0.61			0.54	
Control Delay		1.3	0.1					38.4			35.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		1.3	0.1					38.4			35.7	
LOS		A	A					D			D	
Approach Delay		1.1						38.4			35.7	
Approach LOS		A						D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 20 (25%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 11.3		Intersection LOS: B	
Intersection Capacity Utilization 39.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 16: Buena Vista St & Trinity St



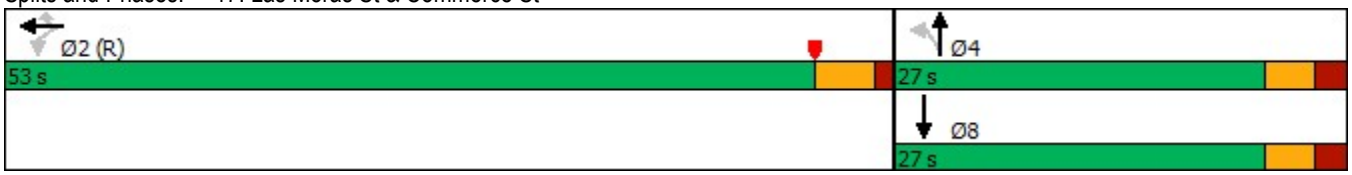


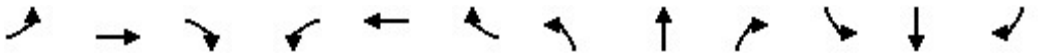
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	15	1242	14	14	4	0	0	15	9
Future Volume (vph)	0	0	0	15	1242	14	14	4	0	0	15	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	150		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.949	
Flt Protected					0.999			0.963				
Satd. Flow (prot)	0	0	0	0	3536	1583	0	1794	0	0	1768	0
Flt Permitted					0.999			0.857				
Satd. Flow (perm)	0	0	0	0	3536	1583	0	1596	0	0	1768	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						27					11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1095			1083			394			323	
Travel Time (s)		24.9			24.6			9.0			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	18	1499	17	17	5	0	0	18	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1517	17	0	22	0	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				14.8	14.8	14.8	11.0	11.0			11.0	
Total Split (s)				53.0	53.0	53.0	27.0	27.0			27.0	
Total Split (%)				66.3%	66.3%	66.3%	33.8%	33.8%			33.8%	
Maximum Green (s)				48.2	48.2	48.2	22.0	22.0			22.0	
Yellow Time (s)				3.6	3.6	3.6	3.0	3.0			3.0	
All-Red Time (s)				1.2	1.2	1.2	2.0	2.0			2.0	
Lost Time Adjust (s)					-0.6	-0.6		-0.6			-0.6	
Total Lost Time (s)					4.2	4.2		4.4			4.4	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Act Effct Green (s)					48.8	48.8		22.6			22.6	
Actuated g/C Ratio					0.61	0.61		0.28			0.28	
v/c Ratio					0.70	0.02		0.05			0.06	
Control Delay					12.9	1.8		24.8			15.7	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					12.9	1.8		24.8			15.7	
LOS					B	A		C			B	
Approach Delay					12.8			24.8			15.7	
Approach LOS					B			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 70 (88%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 13.0		Intersection LOS: B	
Intersection Capacity Utilization 53.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 17: Las Moras St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	541	6	0	0	0	0	7	11	13	5	0
Future Volume (vph)	5	541	6	0	0	0	0	7	11	13	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998						0.918				
Flt Protected											0.965	
Satd. Flow (prot)	0	3532	0	0	0	0	0	1710	0	0	1798	0
Flt Permitted											0.965	
Satd. Flow (perm)	0	3532	0	0	0	0	0	1710	0	0	1798	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1104			1076			327			394	
Travel Time (s)		25.1			24.5			7.4			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	6	670	7	0	0	0	0	9	14	16	6	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	683	0	0	0	0	0	23	0	0	22	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

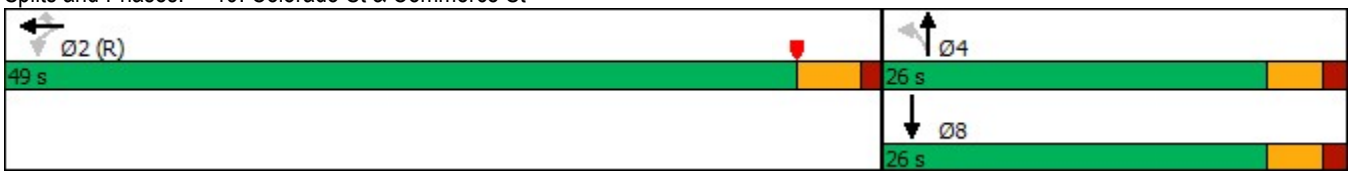
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.9%		ICU Level of Service A	
Analysis Period (min) 15			

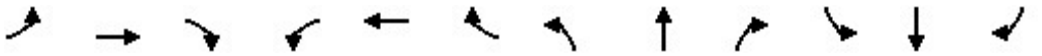
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	108	1049	61	53	325	0	0	256	162
Future Volume (vph)	0	0	0	108	1049	61	53	325	0	0	256	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor					0.99	0.95						
Frt						0.850					0.942	
Flt Protected					0.995			0.993				
Satd. Flow (prot)	0	0	0	0	3522	1583	0	3514	0	0	3334	0
Flt Permitted					0.995			0.787				
Satd. Flow (perm)	0	0	0	0	3495	1503	0	2785	0	0	3334	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						74					56	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			284			390			320	
Travel Time (s)		24.6			6.5			8.9			7.3	
Confl. Peds. (#/hr)				60		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	130	1266	74	64	392	0	0	309	195
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1396	74	0	456	0	0	504	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				25.0	25.0	25.0	20.6	20.6			20.6	
Total Split (s)				49.0	49.0	49.0	26.0	26.0			26.0	
Total Split (%)				65.3%	65.3%	65.3%	34.7%	34.7%			34.7%	
Maximum Green (s)				44.2	44.2	44.2	21.4	21.4			21.4	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)				10.0	10.0	10.0	9.0	9.0			9.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)					45.0	45.0		22.0			22.0	
Actuated g/C Ratio					0.60	0.60		0.29			0.29	
v/c Ratio					0.67	0.08		0.56			0.50	
Control Delay					12.0	2.0		22.0			21.3	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					12.0	2.0		22.0			21.3	
LOS					B	A		C			C	
Approach Delay					11.5			22.0			21.3	
Approach LOS					B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 15.5		Intersection LOS: B	
Intersection Capacity Utilization 71.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 19: Colorado St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	413	31	0	0	0	0	170	47	42	289	0
Future Volume (vph)	116	413	31	0	0	0	0	170	47	42	289	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00
Ped Bike Factor		0.98										
Frt		0.992						0.968				
Flt Protected		0.990									0.994	
Satd. Flow (prot)	0	4981	0	0	0	0	0	3426	0	0	3518	0
Flt Permitted		0.990									0.882	
Satd. Flow (perm)	0	4903	0	0	0	0	0	3426	0	0	3122	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17						54				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1076			1834			473			390	
Travel Time (s)		24.5			41.7			10.8			8.9	
Confl. Peds. (#/hr)	60		30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	144	512	38	0	0	0	0	211	58	52	358	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	694	0	0	0	0	0	269	0	0	410	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	0	100						100		0	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	0	6						6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	25.0	25.0						20.6		20.6	20.6	
Total Split (s)	42.0	42.0						33.0		33.0	33.0	
Total Split (%)	56.0%	56.0%						44.0%		44.0%	44.0%	
Maximum Green (s)	37.2	37.2						28.4		28.4	28.4	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2						1.4		1.4	1.4	
Lost Time Adjust (s)		-0.8						-0.6			-0.6	
Total Lost Time (s)		4.0						4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0						9.0		9.0	9.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)		38.0						29.0			29.0	
Actuated g/C Ratio		0.51						0.39			0.39	
v/c Ratio		0.28						0.20			0.34	
Control Delay		10.7						12.6			9.7	
Queue Delay		0.0						0.0			0.0	
Total Delay		10.7						12.6			9.7	
LOS		B						B			A	
Approach Delay		10.7						12.6			9.7	
Approach LOS		B						B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 10.8		Intersection LOS: B	
Intersection Capacity Utilization 42.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 20: Buena Vista St & Colorado St

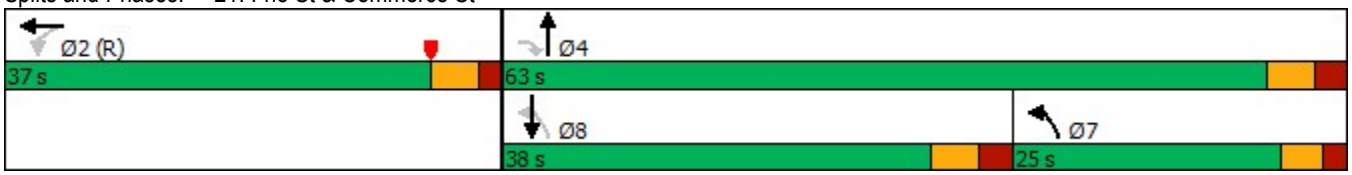


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	62	42	966	38	304	550	0	0	441	317
Future Volume (vph)	0	0	62	42	966	38	304	550	0	0	441	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.865		0.995						0.937	
Flt Protected					0.998		0.950					
Satd. Flow (prot)	0	0	1611	0	5050	0	1770	3539	0	0	3316	0
Flt Permitted					0.998		0.134					
Satd. Flow (perm)	0	0	1611	0	5050	0	250	3539	0	0	3316	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			896		6						68	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1903			501			387			300	
Travel Time (s)		43.3			11.4			8.8			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	75	51	1166	46	367	664	0	0	532	382
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	75	0	1263	0	367	664	0	0	914	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors			1	1	2		1	2			2	
Detector Template			Right	Left	Thru		Left	Thru			Thru	
Leading Detector (ft)			20	20	100		20	100			100	
Trailing Detector (ft)			0	0	0		0	0			0	
Detector 1 Position(ft)			0	0	0		0	0			0	
Detector 1 Size(ft)			20	20	6		20	6			6	
Detector 1 Type			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)			0.0	0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)			0.0	0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)			0.0	0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type			Perm	Perm	NA		D.P+P	NA			NA	
Protected Phases					2		7	4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	2			8					
Detector Phase			4	2	2		7	4			8	
Switch Phase												
Minimum Initial (s)			8.9	9.7	9.7		3.0	8.9			8.9	
Minimum Split (s)			15.0	15.0	15.0		8.0	15.0			15.0	
Total Split (s)			63.0	37.0	37.0		25.0	63.0			38.0	
Total Split (%)			63.0%	37.0%	37.0%		25.0%	63.0%			38.0%	
Maximum Green (s)			56.9	31.7	31.7		20.0	56.9			31.9	
Yellow Time (s)			3.6	3.6	3.6		3.0	3.6			3.6	
All-Red Time (s)			2.5	1.7	1.7		2.0	2.5			2.5	
Lost Time Adjust (s)			0.0		-1.3		-1.0	-2.1			-2.1	
Total Lost Time (s)			6.1		4.0		4.0	4.0			4.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)			1.0	1.0	1.0		1.0	1.0			1.0	
Recall Mode			None	C-Min	C-Min		None	None			None	
Act Effct Green (s)			52.3		37.6		50.4	54.4			31.0	
Actuated g/C Ratio			0.52		0.38		0.50	0.54			0.31	
v/c Ratio			0.06		0.66		0.87	0.35			0.85	
Control Delay			0.1		30.1		46.5	9.8			38.2	
Queue Delay			0.0		0.0		0.0	0.2			0.0	
Total Delay			0.1		30.1		46.5	10.0			38.2	
LOS			A		C		D	B			D	
Approach Delay		0.1			30.1			23.0			38.2	
Approach LOS		A			C			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 29.5		Intersection LOS: C	
Intersection Capacity Utilization 76.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 21: Frio St & Commerce St



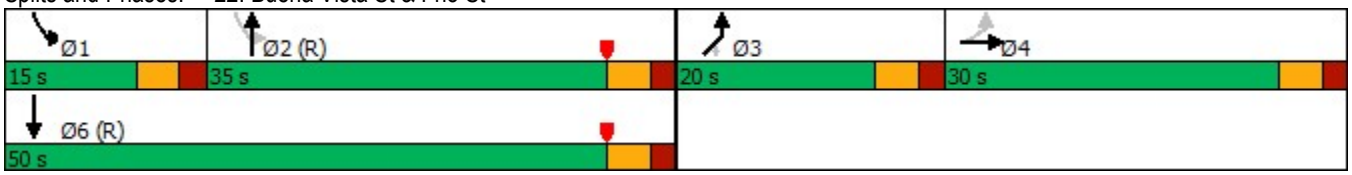


Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	SBR2	NEL	NER	NER2
Lane Configurations											
Traffic Volume (vph)	57	227	123	522	43	39	363	73	144	4	4
Future Volume (vph)	57	227	123	522	43	39	363	73	144	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0		0	100			0	0	
Storage Lanes	0		0		0	1			1	1	
Taper Length (ft)	25					25			25		
Lane Util. Factor	0.91	0.91	0.91	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.955		0.989			0.975		0.995		0.850
Flt Protected		0.993				0.950			0.954		
Satd. Flow (prot)	0	4822	0	3500	0	1770	3451	0	1768	0	1504
Flt Permitted		0.993				0.304			0.954		
Satd. Flow (perm)	0	4822	0	3500	0	566	3451	0	1768	0	1504
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)				9			81		137		137
Link Speed (mph)		30		30			30		30		
Link Distance (ft)		341		398			387		431		
Travel Time (s)		7.8		9.0			8.8		9.8		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	74	296	160	681	56	51	473	95	188	5	5
Shared Lane Traffic (%)											10%
Lane Group Flow (vph)	0	530	0	737	0	51	568	0	194	0	4
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Right	Right
Median Width(ft)		0		12			12		12		
Link Offset(ft)		0		0			0		0		
Crosswalk Width(ft)		16		16			16		16		
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9		9	15		9	15	9	9
Number of Detectors	1	2		2		1	2		1		1
Detector Template	Left	Thru		Thru		Left	Thru		Left		Right
Leading Detector (ft)	20	100		100		20	100		20		20
Trailing Detector (ft)	0	0		0		0	0		0		0
Detector 1 Position(ft)	0	0		0		0	0		0		0
Detector 1 Size(ft)	20	6		6		20	6		20		20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)	0.0	0.0		0.0		0.0	0.0		0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0		0.0	0.0		0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0		0.0	0.0		0.0		0.0
Detector 2 Position(ft)		94		94			94				
Detector 2 Size(ft)		6		6			6				
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)		0.0		0.0			0.0				
Turn Type	Perm	NA		NA		D.P+P	NA		Prot		Perm
Protected Phases		4		2		1	6		3		

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	SBR2	NEL	NER	NER2
Permitted Phases	4					2					3
Detector Phase	4	4		2		1	6		3		3
Switch Phase											
Minimum Initial (s)	14.9	14.9		9.1		3.0	9.1		2.4		2.4
Minimum Split (s)	24.2	24.2		25.2		8.2	38.2		8.6		8.6
Total Split (s)	30.0	30.0		35.0		15.0	50.0		20.0		20.0
Total Split (%)	30.0%	30.0%		35.0%		15.0%	50.0%		20.0%		20.0%
Maximum Green (s)	24.8	24.8		29.8		9.8	44.8		14.8		14.8
Yellow Time (s)	3.2	3.2		3.2		3.2	3.2		3.2		3.2
All-Red Time (s)	2.0	2.0		2.0		2.0	2.0		2.0		2.0
Lost Time Adjust (s)		-1.3		-2.1		-0.4	-2.1		0.0		0.0
Total Lost Time (s)		3.9		3.1		4.8	3.1		5.2		5.2
Lead/Lag	Lag	Lag		Lag		Lead			Lead		Lead
Lead-Lag Optimize?	Yes	Yes		Yes		Yes			Yes		Yes
Vehicle Extension (s)	2.0	2.0		2.0		1.0	2.0		0.2		0.2
Recall Mode	None	None		C-Min		None	C-Min		None		None
Walk Time (s)	7.0	7.0		7.0			7.0				
Flash Dont Walk (s)	12.0	12.0		13.0			26.0				
Pedestrian Calls (#/hr)	0	0		0			0				
Act Effct Green (s)		17.8		55.0		57.7	63.2		6.8		6.8
Actuated g/C Ratio		0.18		0.55		0.58	0.63		0.07		0.07
v/c Ratio		0.62		0.38		0.13	0.26		0.79		0.02
Control Delay		41.1		15.1		4.6	2.7		36.7		0.2
Queue Delay		0.0		0.0		0.0	0.0		0.0		0.0
Total Delay		41.1		15.1		4.6	2.7		36.7		0.2
LOS		D		B		A	A		D		A
Approach Delay		41.1		15.1			2.9		36.0		
Approach LOS		D		B			A		D		

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 20.1		Intersection LOS: C	
Intersection Capacity Utilization 59.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 22: Buena Vista St & Frio St

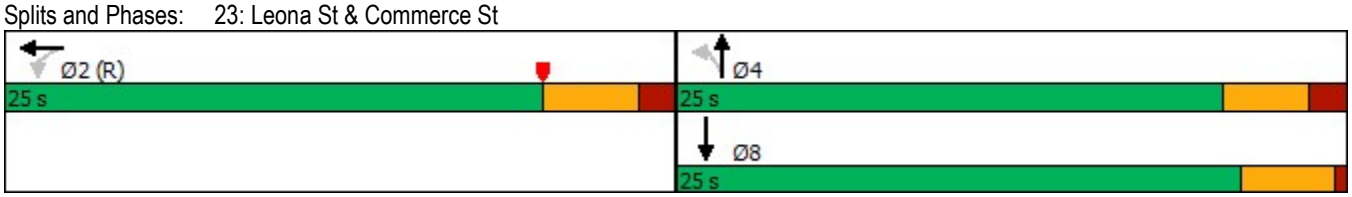


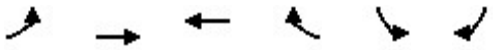
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	820	10	9	6	0	0	5	33
Future Volume (vph)	0	0	0	17	820	10	9	6	0	0	5	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.99							
Frt					0.998						0.883	
Flt Protected					0.999			0.970				
Satd. Flow (prot)	0	0	0	0	5070	0	0	1807	0	0	1645	0
Flt Permitted					0.999			0.810				
Satd. Flow (perm)	0	0	0	0	5043	0	0	1509	0	0	1645	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						40	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		501			236			382			320	
Travel Time (s)		11.4			5.4			8.7			7.3	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	21	989	12	11	7	0	0	6	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1022	0	0	18	0	0	46	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0		6.0	6.0			5.0	
Minimum Split (s)				24.0	24.0		23.7	23.7			23.0	
Total Split (s)				25.0	25.0		25.0	25.0			25.0	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				20.0	20.0		20.3	20.3			21.0	
Yellow Time (s)				3.6	3.6		3.2	3.2			3.5	
All-Red Time (s)				1.4	1.4		1.5	1.5			0.5	
Lost Time Adjust (s)					-1.0			-0.7			-0.7	
Total Lost Time (s)					4.0			4.0			3.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0			3.0	
Recall Mode				C-Min	C-Min		Min	Min			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				12.0	12.0		12.0	12.0			12.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					35.1			6.9			7.6	
Actuated g/C Ratio					0.70			0.14			0.15	
v/c Ratio					0.29			0.09			0.16	
Control Delay					1.9			22.9			9.8	
Queue Delay					0.0			0.0			0.0	
Total Delay					1.9			22.9			9.8	
LOS					A			C			A	
Approach Delay					1.9			22.9			9.8	
Approach LOS					A			C			A	

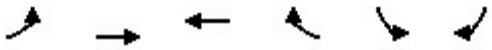
Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 45 (90%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay: 2.6		Intersection LOS: A	
Intersection Capacity Utilization 32.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 23: Leona St & Commerce St





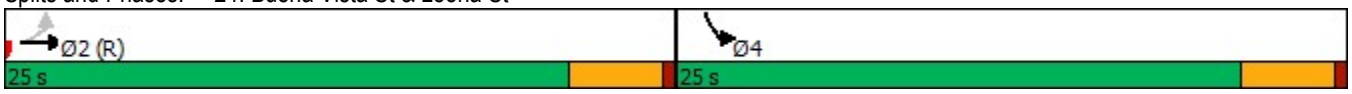
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	13	582	0	0	8	0
Future Volume (vph)	13	582	0	0	8	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.999			0.950	
Satd. Flow (prot)	0	5080	0	0	1770	0
Flt Permitted		0.999			0.950	
Satd. Flow (perm)	0	5080	0	0	1770	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						
Link Speed (mph)		30	30		30	
Link Distance (ft)		308	180		382	
Travel Time (s)		7.0	4.1		8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	17	759	0	0	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	776	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2			1	
Detector Template	Left	Thru			Left	
Leading Detector (ft)	20	100			20	
Trailing Detector (ft)	0	0			0	
Detector 1 Position(ft)	0	0			0	
Detector 1 Size(ft)	20	6			20	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	
Detector 2 Position(ft)		94				
Detector 2 Size(ft)		6				
Detector 2 Type		Cl+Ex				
Detector 2 Channel						
Detector 2 Extend (s)		0.0				
Turn Type	Perm	NA			Prot	
Protected Phases		2			4	
Permitted Phases	2					
Detector Phase	2	2			4	
Switch Phase						

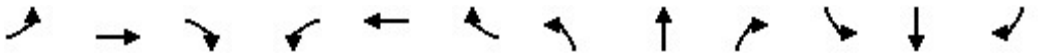


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)	9.0	9.0			6.0	
Minimum Split (s)	13.0	13.0			13.0	
Total Split (s)	25.0	25.0			25.0	
Total Split (%)	50.0%	50.0%			50.0%	
Maximum Green (s)	21.0	21.0			21.0	
Yellow Time (s)	3.5	3.5			3.5	
All-Red Time (s)	0.5	0.5			0.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		4.0			4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.0			1.0	
Recall Mode	C-Min	C-Min			None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			13.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effct Green (s)		47.2			6.0	
Actuated g/C Ratio		0.94			0.12	
v/c Ratio		0.16			0.05	
Control Delay		1.4			20.6	
Queue Delay		0.0			0.0	
Total Delay		1.4			20.6	
LOS		A			C	
Approach Delay		1.4			20.6	
Approach LOS		A			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 20 (40%), Referenced to phase 2:EBTL and 6:, Start of Green			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.16			
Intersection Signal Delay: 1.7		Intersection LOS: A	
Intersection Capacity Utilization 25.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Buena Vista St & Leona St



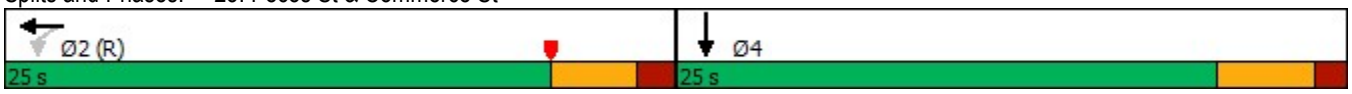


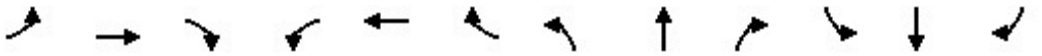
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	259	505	0	0	0	0	0	940	259
Future Volume (vph)	0	0	0	259	505	0	0	0	0	0	940	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Frt											0.968	
Flt Protected					0.983							
Satd. Flow (prot)	0	0	0	0	4999	0	0	0	0	0	4923	0
Flt Permitted					0.983							
Satd. Flow (perm)	0	0	0	0	4999	0	0	0	0	0	4923	0
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)											162	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		155			387			408			325	
Travel Time (s)		3.5			8.8			9.3			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	312	609	0	0	0	0	0	1134	312
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	921	0	0	0	0	0	1446	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	
Detector Template				Left	Thru						Thru	
Leading Detector (ft)				20	100						100	
Trailing Detector (ft)				0	0						0	
Detector 1 Position(ft)				0	0						0	
Detector 1 Size(ft)				20	6						6	
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	
Detector 1 Queue (s)				0.0	0.0						0.0	
Detector 1 Delay (s)				0.0	0.0						0.0	
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	
Protected Phases					2						4	
Permitted Phases				2								
Detector Phase				2	2						4	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)				10.0	10.0						10.0	
Minimum Split (s)				24.7	24.7						23.9	
Total Split (s)				25.0	25.0						25.0	
Total Split (%)				50.0%	50.0%						50.0%	
Maximum Green (s)				20.3	20.3						20.1	
Yellow Time (s)				3.2	3.2						3.6	
All-Red Time (s)				1.5	1.5						1.3	
Lost Time Adjust (s)					-0.7						-0.9	
Total Lost Time (s)					4.0						4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0						1.0	
Recall Mode				C-Min	C-Min						Min	
Walk Time (s)				7.0	7.0						7.0	
Flash Dont Walk (s)				13.0	13.0						12.0	
Pedestrian Calls (#/hr)				0	0						0	
Act Effct Green (s)					22.5						19.5	
Actuated g/C Ratio					0.45						0.39	
v/c Ratio					0.41						0.72	
Control Delay					10.8						13.2	
Queue Delay					0.0						0.0	
Total Delay					10.8						13.2	
LOS					B						B	
Approach Delay					10.8						13.2	
Approach LOS					B						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 40 (80%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 12.2		Intersection LOS: B	
Intersection Capacity Utilization 49.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 25: Pecos St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	482	230	0	0	0	0	0	0	132	949	0
Future Volume (vph)	0	482	230	0	0	0	0	0	0	132	949	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	1.00
Frt		0.952										
Flt Protected											0.994	
Satd. Flow (prot)	0	4841	0	0	0	0	0	0	0	0	6369	0
Flt Permitted											0.994	
Satd. Flow (perm)	0	4841	0	0	0	0	0	0	0	0	6369	0
Right Turn on Red			Yes			Yes			Yes	No		Yes
Satd. Flow (RTOR)		20										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		233			388			389			408	
Travel Time (s)		5.3			8.8			8.8			9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	0	629	300	0	0	0	0	0	0	172	1238	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	929	0	0	0	0	0	0	0	0	1410	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2								1	2	
Detector Template		Thru								Left	Thru	
Leading Detector (ft)		100								0	100	
Trailing Detector (ft)		0								0	0	
Detector 1 Position(ft)		0								0	0	
Detector 1 Size(ft)		6								0	6	
Detector 1 Type		Cl+Ex								Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0								0.0	0.0	
Detector 1 Queue (s)		0.0								0.0	0.0	
Detector 1 Delay (s)		0.0								0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA								Perm	NA	
Protected Phases		4									2	
Permitted Phases										2		
Detector Phase		4								2	2	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)		6.0								20.0	20.0	
Minimum Split (s)		24.7								25.0	25.0	
Total Split (s)		25.0								25.0	25.0	
Total Split (%)		50.0%								50.0%	50.0%	
Maximum Green (s)		20.3								20.0	20.0	
Yellow Time (s)		3.2								3.6	3.6	
All-Red Time (s)		1.5								1.4	1.4	
Lost Time Adjust (s)		-0.7									-1.0	
Total Lost Time (s)		4.0									4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0								4.0	4.0	
Recall Mode		C-Max								Min	Min	
Walk Time (s)		7.0								7.0	7.0	
Flash Dont Walk (s)		13.0								13.0	13.0	
Pedestrian Calls (#/hr)		0								0	0	
Act Effct Green (s)		21.0									21.0	
Actuated g/C Ratio		0.42									0.42	
v/c Ratio		0.45									0.53	
Control Delay		11.6									18.4	
Queue Delay		0.0									0.0	
Total Delay		11.6									18.4	
LOS		B									B	
Approach Delay		11.6									18.4	
Approach LOS		B									B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 20 (40%), Referenced to phase 4:EBT, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 15.7		Intersection LOS: B	
Intersection Capacity Utilization 42.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 26: Buena Vista St & Pecos St

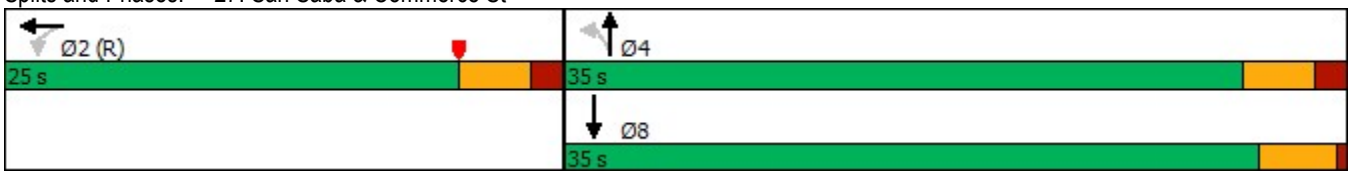


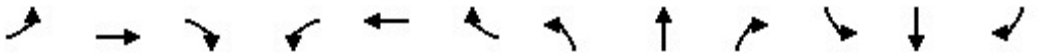
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	745	172	32	146	0	0	0	0
Future Volume (vph)	0	0	0	0	745	172	32	146	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.972							
Flt Protected								0.991				
Satd. Flow (prot)	0	0	0	0	4943	0	0	1846	0	0	1863	0
Flt Permitted								0.950				
Satd. Flow (perm)	0	0	0	0	4943	0	0	1770	0	0	1863	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					101							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		387			563			166			325	
Travel Time (s)		8.8			12.8			3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	0	899	208	39	176	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1107	0	0	215	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			1	
Detector Template					Thru		Left	Thru				
Leading Detector (ft)				0	100		0	100			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				0	6		0	6			0	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA		Perm	NA				
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)				10.0	10.0		5.0	5.0			5.0	
Minimum Split (s)				14.7	14.7		9.7	9.7			9.7	
Total Split (s)				25.0	25.0		35.0	35.0			35.0	
Total Split (%)				41.7%	41.7%		58.3%	58.3%			58.3%	
Maximum Green (s)				20.3	20.3		30.3	30.3			31.0	
Yellow Time (s)				3.2	3.2		3.2	3.2			3.5	
All-Red Time (s)				1.5	1.5		1.5	1.5			0.5	
Lost Time Adjust (s)					-2.0			-1.7			0.0	
Total Lost Time (s)					2.7			3.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0			3.0	
Recall Mode				C-Min	C-Min		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			5.0	
Flash Dont Walk (s)				12.0	12.0		12.0	12.0			11.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			12.7				
Actuated g/C Ratio					0.69			0.21				
v/c Ratio					0.32			0.57				
Control Delay					4.0			26.7				
Queue Delay					0.0			0.0				
Total Delay					4.0			26.7				
LOS					A			C				
Approach Delay					4.0			26.7				
Approach LOS					A			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 47 (78%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 7.7		Intersection LOS: A	
Intersection Capacity Utilization 37.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 27: San Saba & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	638	2	0	0	0	0	1	10	0	0	0
Future Volume (vph)	65	638	2	0	0	0	0	1	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	0		0
Storage Lanes	1		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.57									
Frt			0.850					0.875				
Flt Protected	0.950											
Satd. Flow (prot)	1770	5085	1583	0	0	0	0	1630	0	0	1863	0
Flt Permitted	0.950											
Satd. Flow (perm)	1770	5085	905	0	0	0	0	1630	0	0	1863	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			25					13				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		388			565			393			243	
Travel Time (s)		8.8			12.8			8.9			5.5	
Confl. Peds. (#/hr)			200									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	85	832	3	0	0	0	0	1	13	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	832	3	0	0	0	0	14	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	1	
Detector Template	Left	Thru	Right					Thru				
Leading Detector (ft)	20	100	20					100		0	0	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		0	0	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0				

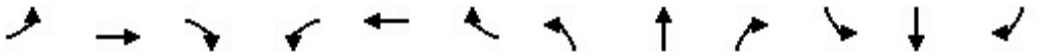
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm					NA				
Protected Phases		2						4			8	
Permitted Phases	2		2							4		
Detector Phase	2	2	2					4		4	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					5.0		5.0	5.0	
Minimum Split (s)	26.0	26.0	26.0					30.0		30.0	25.0	
Total Split (s)	60.0	60.0	60.0					40.0		40.0	40.0	
Total Split (%)	60.0%	60.0%	60.0%					40.0%		40.0%	40.0%	
Maximum Green (s)	54.7	54.7	54.7					34.7		34.7	34.7	
Yellow Time (s)	3.2	3.2	3.2					3.2		3.2	3.2	
All-Red Time (s)	2.1	2.1	2.1					2.1		2.1	2.1	
Lost Time Adjust (s)	-0.6	-0.6	-0.6					-0.6			0.0	
Total Lost Time (s)	4.7	4.7	4.7					4.7			5.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	C-Min	C-Min	C-Min					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0		7.0		
Flash Dont Walk (s)	17.0	17.0	17.0					17.0		17.0		
Pedestrian Calls (#/hr)	0	0	0					0		0		
Act Effct Green (s)	93.9	93.9	93.9					5.7				
Actuated g/C Ratio	0.94	0.94	0.94					0.06				
v/c Ratio	0.05	0.17	0.00					0.13				
Control Delay	0.7	0.6	0.0					26.0				
Queue Delay	0.0	0.0	0.0					0.0				
Total Delay	0.7	0.6	0.0					26.0				
LOS	A	A	A					C				
Approach Delay		0.6						26.0				
Approach LOS		A						C				

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 27.3 (27%), Referenced to phase 2:EBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.17
Intersection Signal Delay: 1.0 Intersection LOS: A
Intersection Capacity Utilization 32.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 28: Dolorosa St & San Saba St



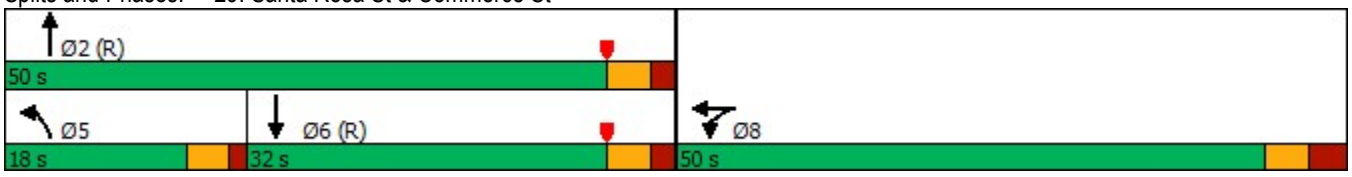


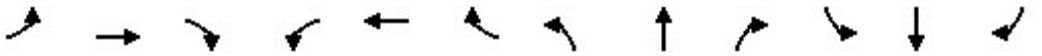
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	83	563	98	185	477	0	0	391	135
Future Volume (vph)	0	0	0	83	563	98	185	477	0	0	391	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		100	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Frt					0.980						0.961	
Flt Protected					0.994		0.950					
Satd. Flow (prot)	0	0	0	0	4954	0	1770	3539	0	0	3401	0
Flt Permitted					0.994		0.950					
Satd. Flow (perm)	0	0	0	0	4954	0	1770	3539	0	0	3401	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					37						48	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			416			374			398	
Travel Time (s)		12.8			9.5			8.5			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	100	679	118	223	576	0	0	472	163
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	897	0	223	576	0	0	635	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases												
Detector Phase				8	8		5	2			6	
Switch Phase												
Minimum Initial (s)				5.0	5.0		3.0	10.0			10.0	
Minimum Split (s)				43.2	43.2		7.4	28.2			29.2	
Total Split (s)				50.0	50.0		18.0	50.0			32.0	
Total Split (%)				50.0%	50.0%		18.0%	50.0%			32.0%	
Maximum Green (s)				43.8	43.8		13.6	44.8			26.8	
Yellow Time (s)				3.2	3.2		3.0	3.2			3.2	
All-Red Time (s)				3.0	3.0		1.4	2.0			2.0	
Lost Time Adjust (s)					-2.2		-0.4	-1.2			-1.2	
Total Lost Time (s)					4.0		4.0	4.0			4.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				Max	Max		Max	C-Max			C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				30.0	30.0			16.0			17.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					46.0		14.0	46.0			28.0	
Actuated g/C Ratio					0.46		0.14	0.46			0.28	
v/c Ratio					0.39		0.90	0.35			0.64	
Control Delay					11.0		72.2	37.2			32.6	
Queue Delay					0.0		0.0	1.3			0.0	
Total Delay					11.0		72.2	38.5			32.6	
LOS					B		E	D			C	
Approach Delay					11.0			47.9			32.6	
Approach LOS					B			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 29.5		Intersection LOS: C	
Intersection Capacity Utilization 54.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 29: Santa Rosa St & Commerce St



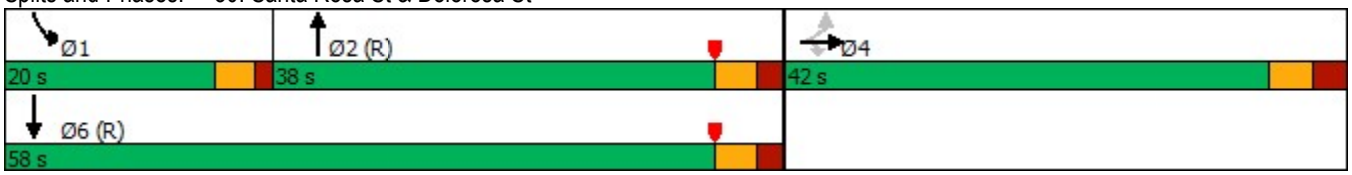


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	464	85	0	0	0	0	631	99	94	598	0
Future Volume (vph)	99	464	85	0	0	0	0	631	99	94	598	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	150		0
Storage Lanes	1		1	0		0	0		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.97	0.95	1.00
Frt			0.850					0.980				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	5085	1583	0	0	0	0	4984	0	3433	3539	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	5085	1583	0	0	0	0	4984	0	3433	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			111					32				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		565			424			416			374	
Travel Time (s)		12.8			9.6			9.5			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	129	605	111	0	0	0	0	823	129	123	780	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	129	605	111	0	0	0	0	952	0	123	780	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					100		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		4						2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4									
Detector Phase	4	4	4					2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0					10.0		3.0	10.0	
Minimum Split (s)	37.9	37.9	37.9					25.2		7.4	29.2	
Total Split (s)	42.0	42.0	42.0					38.0		20.0	58.0	
Total Split (%)	42.0%	42.0%	42.0%					38.0%		20.0%	58.0%	
Maximum Green (s)	36.1	36.1	36.1					32.8		15.6	52.8	
Yellow Time (s)	3.2	3.2	3.2					3.2		3.0	3.2	
All-Red Time (s)	2.7	2.7	2.7					2.0		1.4	2.0	
Lost Time Adjust (s)	-1.9	-1.9	-1.9					-1.2		-0.4	-1.2	
Total Lost Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	Max	Max	Max					C-Max		Max	C-Max	
Walk Time (s)	7.0	7.0	7.0					7.0			7.0	
Flash Dont Walk (s)	25.0	25.0	25.0					13.0			17.0	
Pedestrian Calls (#/hr)	0	0	0					0			0	
Act Effct Green (s)	38.0	38.0	38.0					34.0		16.0	54.0	
Actuated g/C Ratio	0.38	0.38	0.38					0.34		0.16	0.54	
v/c Ratio	0.19	0.31	0.17					0.56		0.22	0.41	
Control Delay	18.6	18.7	6.2					27.4		29.5	7.5	
Queue Delay	0.0	0.0	0.0					0.0		0.0	1.0	
Total Delay	18.6	18.7	6.2					27.4		29.5	8.5	
LOS	B	B	A					C		C	A	
Approach Delay		17.0						27.4			11.4	
Approach LOS		B						C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 60 (60%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 18.8		Intersection LOS: B	
Intersection Capacity Utilization 54.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 30: Santa Rosa St & Dolorosa St

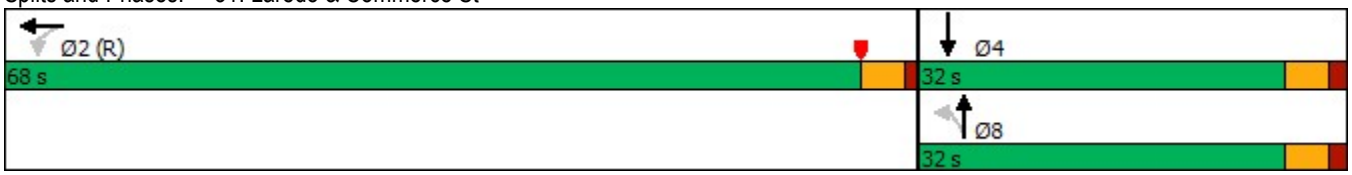


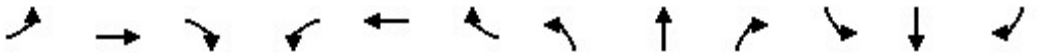
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	57	785	14	15	2	0	0	21	25
Future Volume (vph)	0	0	0	57	785	14	15	2	0	0	21	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.99							
Frt					0.998						0.926	
Flt Protected					0.997			0.957				
Satd. Flow (prot)	0	0	0	0	5060	0	0	1783	0	0	1725	0
Flt Permitted					0.997			0.825				
Satd. Flow (perm)	0	0	0	0	5007	0	0	1537	0	0	1725	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5						30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		416			807			422			525	
Travel Time (s)		9.5			18.3			9.6			11.9	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	69	947	17	18	2	0	0	25	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1033	0	0	20	0	0	55	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				0	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				0	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			8			4	
Permitted Phases				2			8					
Detector Phase				2	2		8	8			4	
Switch Phase												
Minimum Initial (s)				10.0	10.0		5.0	5.0			5.0	
Minimum Split (s)				14.3	14.3		9.7	9.7			9.7	
Total Split (s)				68.0	68.0		32.0	32.0			32.0	
Total Split (%)				68.0%	68.0%		32.0%	32.0%			32.0%	
Maximum Green (s)				63.7	63.7		27.3	27.3			27.3	
Yellow Time (s)				3.2	3.2		3.2	3.2			3.2	
All-Red Time (s)				1.1	1.1		1.5	1.5			1.5	
Lost Time Adjust (s)					-0.3			0.0			-0.7	
Total Lost Time (s)					4.0			4.7			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					64.0			27.3			28.0	
Actuated g/C Ratio					0.64			0.27			0.28	
v/c Ratio					0.32			0.05			0.11	
Control Delay					6.3			22.6			15.7	
Queue Delay					0.0			0.0			0.0	
Total Delay					6.3			22.6			15.7	
LOS					A			C			B	
Approach Delay					6.3			22.6			15.7	
Approach LOS					A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 65 (65%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.32			
Intersection Signal Delay: 7.0		Intersection LOS: A	
Intersection Capacity Utilization 33.4%		ICU Level of Service A	
Analysis Period (min) 15			

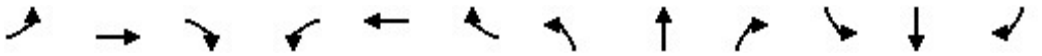
Splits and Phases: 31: Laredo & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	447	0	0	0	0	0	8	7	72	0	0
Future Volume (vph)	8	447	0	0	0	0	0	8	7	72	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt								0.936				
Flt Protected		0.999									0.950	
Satd. Flow (prot)	0	5080	0	0	0	0	0	1744	0	0	1770	0
Flt Permitted		0.999									0.950	
Satd. Flow (perm)	0	5080	0	0	0	0	0	1744	0	0	1770	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		424			814			274			422	
Travel Time (s)		9.6			18.5			6.2			9.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	100%	100%	100%	100%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	10	583	0	0	0	0	0	10	9	94	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	593	0	0	0	0	0	19	0	0	94	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.7%		ICU Level of Service A	
Analysis Period (min) 15			

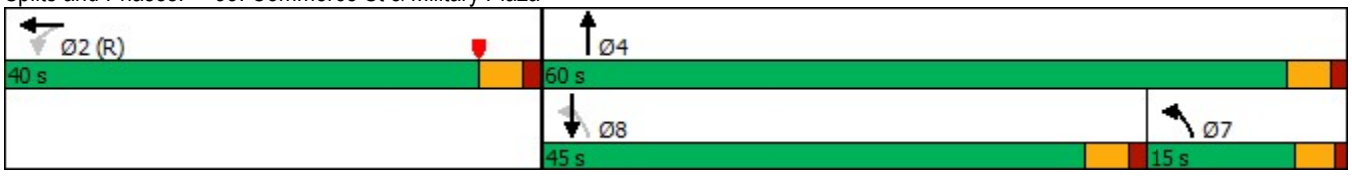


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	172	715	73	74	298	0	0	336	67
Future Volume (vph)	0	0	0	172	715	73	74	298	0	0	336	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.989						0.975	
Flt Protected					0.991			0.990				
Satd. Flow (prot)	0	0	0	0	4984	0	0	3504	0	0	3451	0
Flt Permitted					0.991			0.645				
Satd. Flow (perm)	0	0	0	0	4984	0	0	2283	0	0	3451	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					15						29	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		807			265			167			470	
Travel Time (s)		18.3			6.0			3.8			10.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	208	863	88	89	360	0	0	405	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1159	0	0	449	0	0	486	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		D.P+P	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2			8					
Detector Phase				2	2		7	4			8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)				10.0	10.0		3.0	10.0			10.0	
Minimum Split (s)				20.0	20.0		10.0	25.0			15.0	
Total Split (s)				40.0	40.0		15.0	60.0			45.0	
Total Split (%)				40.0%	40.0%		15.0%	60.0%			45.0%	
Maximum Green (s)				35.3	35.3		11.0	55.4			40.4	
Yellow Time (s)				3.2	3.2		3.0	3.2			3.2	
All-Red Time (s)				1.5	1.5		1.0	1.4			1.4	
Lost Time Adjust (s)					-2.0			-2.0			-2.0	
Total Lost Time (s)					2.7			2.6			2.6	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				C-Max	C-Max		Min	Min			Min	
Act Effct Green (s)					68.0			26.7			19.2	
Actuated g/C Ratio					0.68			0.27			0.19	
v/c Ratio					0.34			0.67			0.71	
Control Delay					7.3			40.2			41.0	
Queue Delay					1.2			0.0			0.0	
Total Delay					8.5			40.2			41.0	
LOS					A			D			D	
Approach Delay					8.5			40.2			41.0	
Approach LOS					A			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 60 (60%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 22.9		Intersection LOS: C	
Intersection Capacity Utilization 55.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 33: Commerce St & Military Plaza



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	416	51	0	0	0	0	315	64	92	412	0
Future Volume (vph)	59	416	51	0	0	0	0	315	64	92	412	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	130		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850					0.975				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	3539	1583	0	0	0	0	3451	0	1770	3539	0
Flt Permitted	0.950									0.429		
Satd. Flow (perm)	1770	3539	1583	0	0	0	0	3451	0	799	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			116					21				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		814			454			543			226	
Travel Time (s)		18.5			10.3			12.3			5.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	77	543	67	0	0	0	0	411	83	120	537	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	543	67	0	0	0	0	494	0	120	537	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	0	100	20					100		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	0	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA		D.P+P	NA	
Protected Phases		2						4		3	8	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Growth Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2							4		
Detector Phase	2	2	2					4		3	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0		3.0	10.0	
Minimum Split (s)	20.0	20.0	20.0					15.0		10.0	25.0	
Total Split (s)	29.0	29.0	29.0					24.0		17.0	41.0	
Total Split (%)	29.0%	29.0%	29.0%					24.0%		17.0%	41.0%	
Maximum Green (s)	24.0	24.0	24.0					19.2		12.8	36.2	
Yellow Time (s)	3.2	3.2	3.2					3.2		3.0	3.2	
All-Red Time (s)	1.8	1.8	1.8					1.6		1.2	1.6	
Lost Time Adjust (s)	0.0	-1.0	0.0					-0.8		-0.2	-0.8	
Total Lost Time (s)	5.0	4.0	5.0					4.0		4.0	4.0	
Lead/Lag								Lead		Lag		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	C-Max	C-Max	C-Max					Max		Max	Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	24.0	25.0	24.0					50.0		63.0	67.0	
Actuated g/C Ratio	0.24	0.25	0.24					0.50		0.63	0.67	
v/c Ratio	0.18	0.61	0.14					0.28		0.19	0.23	
Control Delay	18.6	24.3	0.9					14.4		5.0	4.0	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay	18.6	24.3	0.9					14.4		5.0	4.0	
LOS	B	C	A					B		A	A	
Approach Delay		21.4						14.4			4.2	
Approach LOS		C						B			A	

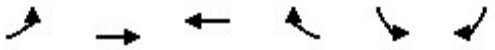
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 18 (18%), Referenced to phase 2:EBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 13.4		Intersection LOS: B	
Intersection Capacity Utilization 42.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 34: Flores St & Dolorosa St

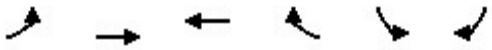


Lane Group	Ø10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	20.0
Total Split (s)	30.0
Total Split (%)	30%
Maximum Green (s)	26.0
Yellow Time (s)	3.5
All-Red Time (s)	0.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø7
Lane Configurations							
Traffic Volume (vph)	0	0	618	4	0	301	
Future Volume (vph)	0	0	618	4	0	301	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0			150	0	0	
Storage Lanes	0			0	0	1	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00	
Frt			0.999			0.865	
Flt Protected							
Satd. Flow (prot)	0	0	5080	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	0	0	5080	0	0	1611	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			2			280	
Link Speed (mph)		30	30		30		
Link Distance (ft)		265	234		513		
Travel Time (s)		6.0	5.3		11.7		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Growth Factor	111%	111%	111%	111%	111%	111%	
Adj. Flow (vph)	0	0	746	5	0	363	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	751	0	0	363	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		0		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors			2			1	
Detector Template			Thru			Right	
Leading Detector (ft)			100			20	
Trailing Detector (ft)			0			0	
Detector 1 Position(ft)			0			0	
Detector 1 Size(ft)			6			20	
Detector 1 Type			Cl+Ex			Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)			0.0			0.0	
Detector 1 Queue (s)			0.0			0.0	
Detector 1 Delay (s)			0.0			0.0	
Detector 2 Position(ft)			94				
Detector 2 Size(ft)			6				
Detector 2 Type			Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)			0.0				
Turn Type			NA			Prot	
Protected Phases			2			8	7



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø7
Permitted Phases							
Detector Phase			2			8	
Switch Phase							
Minimum Initial (s)			10.0			6.0	5.0
Minimum Split (s)			30.0			25.0	9.0
Total Split (s)			50.0			25.0	9.0
Total Split (%)			59.5%			29.8%	11%
Maximum Green (s)			45.3			21.0	5.0
Yellow Time (s)			3.2			3.5	3.5
All-Red Time (s)			1.5			0.5	0.5
Lost Time Adjust (s)			-1.7			-2.0	
Total Lost Time (s)			3.0			2.0	
Lead/Lag						Lag	Lead
Lead-Lag Optimize?						Yes	Yes
Vehicle Extension (s)			1.0			3.0	3.0
Recall Mode			C-Max			None	None
Walk Time (s)			7.0			7.0	
Flash Dont Walk (s)			10.0			12.0	
Pedestrian Calls (#/hr)			0			0	
Act Effct Green (s)			65.4			13.6	
Actuated g/C Ratio			0.78			0.16	
v/c Ratio			0.19			0.73	
Control Delay			3.1			17.3	
Queue Delay			0.4			0.0	
Total Delay			3.5			17.3	
LOS			A			B	
Approach Delay			3.5		17.3		
Approach LOS			A		B		

Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 84			
Offset: 20 (24%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 8.0		Intersection LOS: A	
Intersection Capacity Utilization 40.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 35: Commerce St & N Main Ave



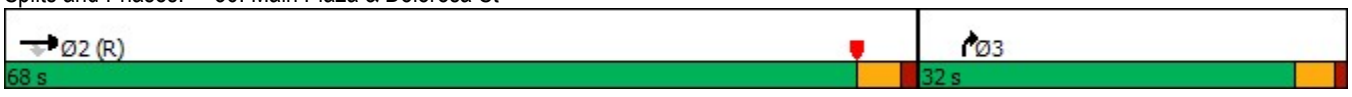


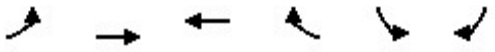
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	664	0	0	0	0	4
Future Volume (vph)	664	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	0		0	0
Storage Lanes		1	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	1863	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	1863	0	0	0	1611
Right Turn on Red		Yes				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	454			501	380	
Travel Time (s)	10.3			11.4	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	852	0	0	0	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	852	0	0	0	0	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1				1
Detector Template	Thru					Right
Leading Detector (ft)	100	0				20
Trailing Detector (ft)	0	0				0
Detector 1 Position(ft)	0	0				0
Detector 1 Size(ft)	6	0				20
Detector 1 Type	Cl+Ex	Cl+Ex				Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0				0.0
Detector 1 Queue (s)	0.0	0.0				0.0
Detector 1 Delay (s)	0.0	0.0				0.0
Detector 2 Position(ft)	94					
Detector 2 Size(ft)	6					
Detector 2 Type	Cl+Ex					
Detector 2 Channel						
Detector 2 Extend (s)	0.0					
Turn Type	NA	Perm				Prot
Protected Phases	2					3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases		2				
Detector Phase	2	2				3
Switch Phase						
Minimum Initial (s)	10.0	10.0				5.0
Minimum Split (s)	20.6	20.6				20.0
Total Split (s)	68.0	68.0				32.0
Total Split (%)	68.0%	68.0%				32.0%
Maximum Green (s)	63.4	63.4				28.0
Yellow Time (s)	3.2	3.2				3.0
All-Red Time (s)	1.4	1.4				1.0
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	4.6	4.6				4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0				3.0
Recall Mode	C-Max	C-Max				Max
Walk Time (s)	5.0	5.0				5.0
Flash Dont Walk (s)	11.0	11.0				11.0
Pedestrian Calls (#/hr)	0	0				0
Act Effct Green (s)	63.4					28.0
Actuated g/C Ratio	0.63					0.28
v/c Ratio	0.38					0.01
Control Delay	4.6					26.2
Queue Delay	0.1					0.0
Total Delay	4.6					26.2
LOS	A					C
Approach Delay	4.6				26.2	
Approach LOS	A				C	

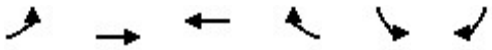
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 35 (35%), Referenced to phase 2:EBT and 6:, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 4.8		Intersection LOS: A	
Intersection Capacity Utilization 33.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 36: Main Plaza & Dolorosa St





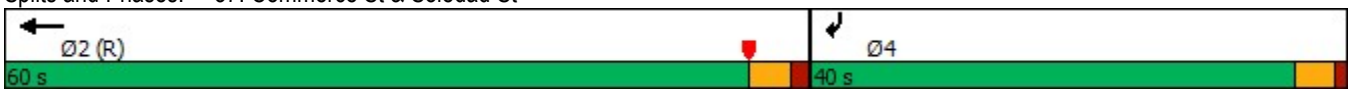
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	603	185	0	4
Future Volume (vph)	0	0	603	185	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			150	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt			0.965			0.865
Flt Protected						
Satd. Flow (prot)	0	0	4907	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	4907	0	0	1611
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			124			194
Link Speed (mph)		30	30		30	
Link Distance (ft)		234	520		565	
Travel Time (s)		5.3	11.8		12.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	728	223	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	951	0	0	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors			2			1
Detector Template			Thru			Right
Leading Detector (ft)			100			20
Trailing Detector (ft)			0			0
Detector 1 Position(ft)			0			0
Detector 1 Size(ft)			6			20
Detector 1 Type			Cl+Ex			Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)			0.0			0.0
Detector 1 Queue (s)			0.0			0.0
Detector 1 Delay (s)			0.0			0.0
Detector 2 Position(ft)			94			
Detector 2 Size(ft)			6			
Detector 2 Type			Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)			0.0			
Turn Type			NA			Prot
Protected Phases			2			4



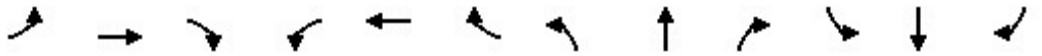
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases						
Detector Phase			2			4
Switch Phase						
Minimum Initial (s)			10.0			6.0
Minimum Split (s)			30.0			25.0
Total Split (s)			60.0			40.0
Total Split (%)			60.0%			40.0%
Maximum Green (s)			55.3			36.0
Yellow Time (s)			3.2			3.0
All-Red Time (s)			1.5			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.7			4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)			1.0			1.0
Recall Mode			C-Max			None
Act Effct Green (s)			97.1			6.0
Actuated g/C Ratio			0.97			0.06
v/c Ratio			0.20			0.02
Control Delay			0.2			0.2
Queue Delay			0.0			0.0
Total Delay			0.2			0.2
LOS			A			A
Approach Delay			0.2		0.2	
Approach LOS			A		A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 20 (20%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.20			
Intersection Signal Delay: 0.2		Intersection LOS: A	
Intersection Capacity Utilization 29.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Commerce St & Soledad St



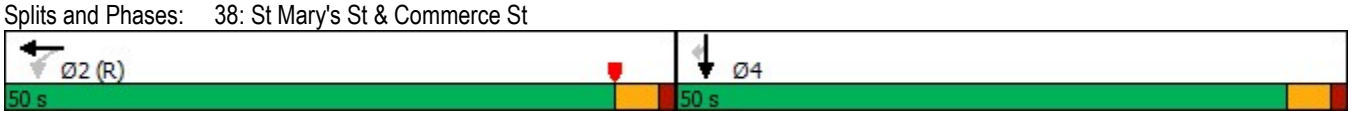
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	140	740	0	0	0	0	0	541	135
Future Volume (vph)	0	0	0	140	740	0	0	0	0	0	541	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		150
Storage Lanes	0		0	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												0.850
Flt Protected					0.992							
Satd. Flow (prot)	0	0	0	0	5045	0	0	0	0	0	3539	1583
Flt Permitted					0.992							
Satd. Flow (perm)	0	0	0	0	5045	0	0	0	0	0	3539	1583
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)												82
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		520			534			212			291	
Travel Time (s)		11.8			12.1			4.8			6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	169	893	0	0	0	0	0	653	163
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1062	0	0	0	0	0	653	163
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	
Leading Detector (ft)				0	100						100	0
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				0	6						6	0
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	Perm
Protected Phases					2						4	

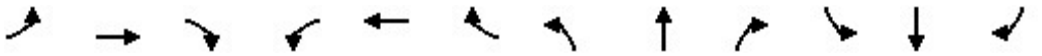


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2								4
Detector Phase				2	2						4	4
Switch Phase												
Minimum Initial (s)				10.0	10.0						5.0	5.0
Minimum Split (s)				28.6	28.6						28.6	28.6
Total Split (s)				50.0	50.0						50.0	50.0
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				45.4	45.4						45.4	45.4
Yellow Time (s)				3.2	3.2						3.2	3.2
All-Red Time (s)				1.4	1.4						1.4	1.4
Lost Time Adjust (s)					-0.6						-0.6	0.0
Total Lost Time (s)					4.0						4.0	4.6
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0						1.0	1.0
Recall Mode				C-Max	C-Max						Max	Max
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Dont Walk (s)				17.0	17.0						17.0	17.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)					46.0						46.0	45.4
Actuated g/C Ratio					0.46						0.46	0.45
v/c Ratio					0.46						0.40	0.21
Control Delay					14.6						18.8	9.1
Queue Delay					0.0						4.0	0.0
Total Delay					14.6						22.8	9.1
LOS					B						C	A
Approach Delay					14.6						20.1	
Approach LOS					B						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 9 (9%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay: 17.0		Intersection LOS: B	
Intersection Capacity Utilization 42.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 38: St Mary's St & Commerce St



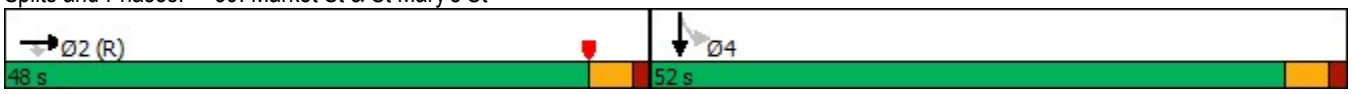


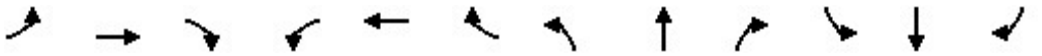
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	669	90	0	0	0	0	0	0	263	392	0
Future Volume (vph)	0	669	90	0	0	0	0	0	0	263	392	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	0		150
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									
Flt Protected											0.980	
Satd. Flow (prot)	0	3539	1583	0	0	0	0	0	0	0	3468	0
Flt Permitted											0.980	
Satd. Flow (perm)	0	3539	1583	0	0	0	0	0	0	0	3468	0
Right Turn on Red			Yes			Yes			Yes	No		Yes
Satd. Flow (RTOR)			81									
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		501			530			201			212	
Travel Time (s)		11.4			12.0			4.6			4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	0	858	115	0	0	0	0	0	0	337	503	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	858	115	0	0	0	0	0	0	0	840	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1							1	2	
Detector Template		Thru	Right							Left	Thru	
Leading Detector (ft)		100	20							0	100	
Trailing Detector (ft)		0	0							0	0	
Detector 1 Position(ft)		0	0							0	0	
Detector 1 Size(ft)		6	20							0	6	
Detector 1 Type		Cl+Ex	Cl+Ex							Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0							0.0	0.0	
Detector 1 Queue (s)		0.0	0.0							0.0	0.0	
Detector 1 Delay (s)		0.0	0.0							0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2							4		
Detector Phase		2	2							4	4	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		14.5	14.5							14.7	14.7	
Total Split (s)		48.0	48.0							52.0	52.0	
Total Split (%)		48.0%	48.0%							52.0%	52.0%	
Maximum Green (s)		43.5	43.5							47.3	47.3	
Yellow Time (s)		3.2	3.2							3.2	3.2	
All-Red Time (s)		1.3	1.3							1.5	1.5	
Lost Time Adjust (s)		-0.5	0.0								-0.7	
Total Lost Time (s)		4.0	4.5								4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0	1.0							1.0	1.0	
Recall Mode		C-Max	C-Max							Max	Max	
Act Effct Green (s)		44.0	43.5								48.0	
Actuated g/C Ratio		0.44	0.44								0.48	
v/c Ratio		0.55	0.16								0.50	
Control Delay		8.1	1.5								18.8	
Queue Delay		0.1	0.0								9.2	
Total Delay		8.2	1.5								27.9	
LOS		A	A								C	
Approach Delay		7.5									27.9	
Approach LOS		A									C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 37 (37%), Referenced to phase 2:EBT, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 39: Market St & St Mary's St



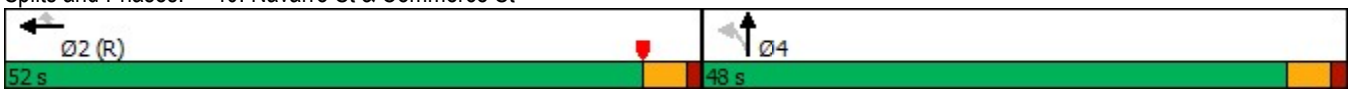


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	646	97	181	384	0	0	0	0
Future Volume (vph)	0	0	0	0	646	97	181	384	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt						0.850						
Flt Protected								0.984				
Satd. Flow (prot)	0	0	0	0	5085	1583	0	5004	0	0	0	0
Flt Permitted								0.984				
Satd. Flow (perm)	0	0	0	0	5085	1583	0	5004	0	0	0	0
Right Turn on Red			Yes			Yes	No		Yes			Yes
Satd. Flow (RTOR)						87						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		534			258			251			297	
Travel Time (s)		12.1			5.9			5.7			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	0	779	117	218	463	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	779	117	0	681	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	0	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	0	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					2			4				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						2	4					
Detector Phase					2	2	4	4				
Switch Phase												
Minimum Initial (s)					10.0	10.0	5.0	5.0				
Minimum Split (s)					14.5	14.5	9.6	9.6				
Total Split (s)					52.0	52.0	48.0	48.0				
Total Split (%)					52.0%	52.0%	48.0%	48.0%				
Maximum Green (s)					47.5	47.5	43.4	43.4				
Yellow Time (s)					3.2	3.2	3.2	3.2				
All-Red Time (s)					1.3	1.3	1.4	1.4				
Lost Time Adjust (s)					-1.7	-1.7		-2.0				
Total Lost Time (s)					2.8	2.8		2.6				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					1.0	1.0	1.0	1.0				
Recall Mode					C-Max	C-Max	Max	Max				
Act Effct Green (s)					49.2	49.2		45.4				
Actuated g/C Ratio					0.49	0.49		0.45				
v/c Ratio					0.31	0.14		0.30				
Control Delay					3.5	1.1		14.9				
Queue Delay					0.2	0.0		0.6				
Total Delay					3.7	1.1		15.5				
LOS					A	A		B				
Approach Delay					3.4			15.5				
Approach LOS					A			B				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 85 (85%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay: 8.6		Intersection LOS: A	
Intersection Capacity Utilization 32.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Navarro St & Commerce St

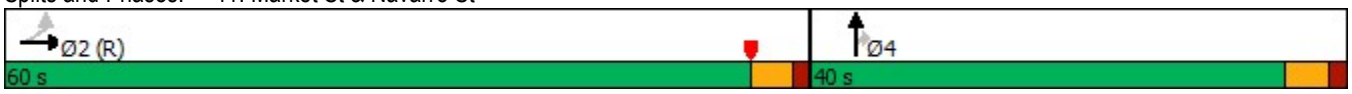


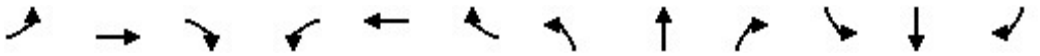
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	241	807	0	0	0	0	0	360	156	0	0	0
Future Volume (vph)	241	807	0	0	0	0	0	360	156	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected		0.989										
Satd. Flow (prot)	0	3500	0	0	0	0	0	3539	1583	0	0	0
Flt Permitted		0.989										
Satd. Flow (perm)	0	3500	0	0	0	0	0	3539	1583	0	0	0
Right Turn on Red	No		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									99			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		530			100			275			251	
Travel Time (s)		12.0			2.3			6.3			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	309	1035	0	0	0	0	0	462	200	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1344	0	0	0	0	0	462	200	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2	1			
Detector Template	Left	Thru						Thru	Right			
Leading Detector (ft)	0	100						100	20			
Trailing Detector (ft)	0	0						0	0			
Detector 1 Position(ft)	0	0						0	0			
Detector 1 Size(ft)	0	6						6	20			
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0	0.0			
Detector 1 Queue (s)	0.0	0.0						0.0	0.0			
Detector 1 Delay (s)	0.0	0.0						0.0	0.0			
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0				
Turn Type	Perm	NA						NA	Perm			
Protected Phases		2						4				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2								4			
Detector Phase	2	2						4	4			
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0	10.0			
Minimum Split (s)	14.5	14.5						14.7	14.7			
Total Split (s)	60.0	60.0						40.0	40.0			
Total Split (%)	60.0%	60.0%						40.0%	40.0%			
Maximum Green (s)	55.5	55.5						35.3	35.3			
Yellow Time (s)	3.2	3.2						3.2	3.2			
All-Red Time (s)	1.3	1.3						1.5	1.5			
Lost Time Adjust (s)		-1.7						-2.0	-2.0			
Total Lost Time (s)		2.8						2.7	2.7			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0	1.0			
Recall Mode	C-Max	C-Max						Max	Max			
Act Effct Green (s)		57.2						37.3	37.3			
Actuated g/C Ratio		0.57						0.37	0.37			
v/c Ratio		0.67						0.35	0.31			
Control Delay		10.9						23.6	12.5			
Queue Delay		1.2						0.0	0.0			
Total Delay		12.0						23.6	12.5			
LOS		B						C	B			
Approach Delay		12.0						20.2				
Approach LOS		B						C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 75 (75%), Referenced to phase 2:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 14.7		Intersection LOS: B	
Intersection Capacity Utilization 53.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Market St & Navarro St



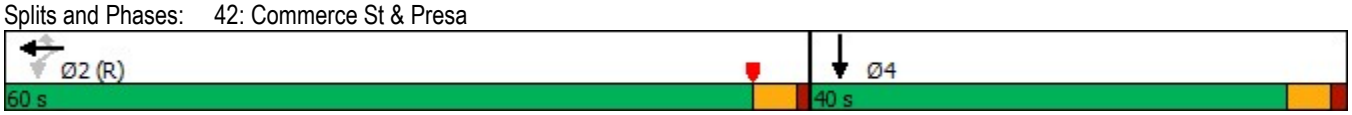


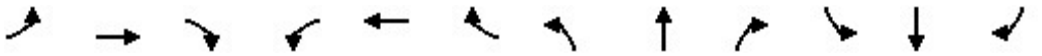
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	62	726	59	0	0	0	0	94	38
Future Volume (vph)	0	0	0	62	726	59	0	0	0	0	94	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.80						
Frt						0.850					0.961	
Flt Protected					0.996							
Satd. Flow (prot)	0	0	0	0	5065	1583	0	0	0	0	1790	0
Flt Permitted					0.996							
Satd. Flow (perm)	0	0	0	0	5065	1273	0	0	0	0	1790	0
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)						50					23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		258			287			262			386	
Travel Time (s)		5.9			6.5			6.0			8.8	
Confl. Peds. (#/hr)						200						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	75	876	71	0	0	0	0	113	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	951	71	0	0	0	0	159	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1					2	
Detector Template				Left	Thru	Right					Thru	
Leading Detector (ft)				0	100	20					100	
Trailing Detector (ft)				0	0	0					0	
Detector 1 Position(ft)				0	0	0					0	
Detector 1 Size(ft)				0	6	20					6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0					0.0	
Detector 1 Queue (s)				0.0	0.0	0.0					0.0	
Detector 1 Delay (s)				0.0	0.0	0.0					0.0	
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA	Perm					NA	
Protected Phases					2						4	
Permitted Phases				2		2						
Detector Phase				2	2	2					4	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0					5.0	
Minimum Split (s)				14.3	14.3	14.3					9.6	
Total Split (s)				60.0	60.0	60.0					40.0	
Total Split (%)				60.0%	60.0%	60.0%					40.0%	
Maximum Green (s)				55.7	55.7	55.7					35.4	
Yellow Time (s)				3.2	3.2	3.2					3.2	
All-Red Time (s)				1.1	1.1	1.1					1.4	
Lost Time Adjust (s)					-0.3	0.0					-0.6	
Total Lost Time (s)					4.0	4.3					4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0					1.0	
Recall Mode				C-Max	C-Max	C-Max					Max	
Act Effct Green (s)					56.0	55.7					36.0	
Actuated g/C Ratio					0.56	0.56					0.36	
v/c Ratio					0.34	0.10					0.24	
Control Delay					4.4	0.6					20.2	
Queue Delay					0.2	0.0					0.0	
Total Delay					4.6	0.6					20.2	
LOS					A	A					C	
Approach Delay					4.3						20.2	
Approach LOS					A						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 80 (80%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 6.5		Intersection LOS: A	
Intersection Capacity Utilization 44.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 42: Commerce St & Presa



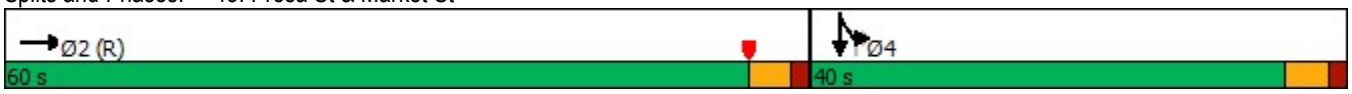


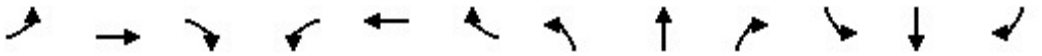
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	940	23	0	0	0	0	0	44	136	78	0
Future Volume (vph)	0	940	23	0	0	0	0	0	44	136	78	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850						0.865			
Flt Protected										0.950	0.986	
Satd. Flow (prot)	0	3390	1441	0	0	0	0	0	1611	1681	1745	0
Flt Permitted										0.950	0.986	
Satd. Flow (perm)	0	3390	1441	0	0	0	0	0	1611	1681	1745	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			70						61	61	22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		159			275			339			262	
Travel Time (s)		3.6			6.3			7.7			6.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	0	1206	30	0	0	0	0	0	56	174	100	0
Shared Lane Traffic (%)			10%							23%		
Lane Group Flow (vph)	0	1209	27	0	0	0	0	0	56	134	140	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1						1	1	2	
Detector Template		Thru	Right						Right	Left	Thru	
Leading Detector (ft)		100	20						20	20	100	
Trailing Detector (ft)		0	0						0	0	0	
Detector 1 Position(ft)		0	0						0	0	0	
Detector 1 Size(ft)		6	20						20	20	6	
Detector 1 Type		Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0						0.0	0.0	0.0	
Detector 1 Queue (s)		0.0	0.0						0.0	0.0	0.0	
Detector 1 Delay (s)		0.0	0.0						0.0	0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA	NA						Perm	Split	NA	
Protected Phases		2								4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases									4			
Detector Phase		2							4	4	4	
Switch Phase												
Minimum Initial (s)		10.0							5.0	5.0	5.0	
Minimum Split (s)		14.7							9.7	9.7	9.7	
Total Split (s)		60.0							40.0	40.0	40.0	
Total Split (%)		60.0%							40.0%	40.0%	40.0%	
Maximum Green (s)		55.3							35.3	35.3	35.3	
Yellow Time (s)		3.2							3.2	3.2	3.2	
All-Red Time (s)		1.5							1.5	1.5	1.5	
Lost Time Adjust (s)		-0.7							-0.7	-0.7	-0.7	
Total Lost Time (s)		4.0							4.0	4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0							1.0	1.0	1.0	
Recall Mode		C-Max							Max	Max	Max	
Act Effct Green (s)		56.0	0.0						36.0	36.0	36.0	
Actuated g/C Ratio		0.56	0.00						0.36	0.36	0.36	
v/c Ratio		0.64	0.39						0.09	0.21	0.22	
Control Delay		6.0	21.1						5.7	10.7	16.9	
Queue Delay		0.5	0.0						0.0	0.6	0.8	
Total Delay		6.5	21.1						5.7	11.4	17.8	
LOS		A	C						A	B	B	
Approach Delay		6.8						5.7			14.6	
Approach LOS		A						A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 80 (80%), Referenced to phase 2:EBT, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 8.1		Intersection LOS: A	
Intersection Capacity Utilization 44.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 43: Presa St & Market St





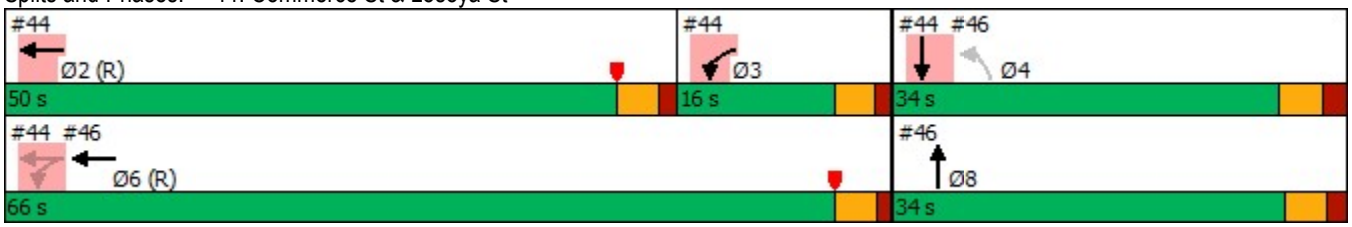
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	190	847	0	0	0	0	0	302	94
Future Volume (vph)	0	0	0	190	847	0	0	0	0	0	302	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt											0.964	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	5085	0	0	0	0	0	3412	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	5085	0	0	0	0	0	3412	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)				229							43	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		287			180			173			345	
Travel Time (s)		6.5			4.1			3.9			7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	229	1022	0	0	0	0	0	364	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	229	1022	0	0	0	0	0	477	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	
Detector Template				Left	Thru						Thru	
Leading Detector (ft)				20	100						100	
Trailing Detector (ft)				0	0						0	
Detector 1 Position(ft)				0	0						0	
Detector 1 Size(ft)				20	6						6	
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	
Detector 1 Queue (s)				0.0	0.0						0.0	
Detector 1 Delay (s)				0.0	0.0						0.0	
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				custom	NA						NA	
Protected Phases				3	2						4	
Permitted Phases				6	6							
Detector Phase				3	2						4	
Switch Phase												

Lane Group	Ø6	Ø8
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Growth Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	6	8
Permitted Phases		
Detector Phase		
Switch Phase		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)				3.0	10.0						5.0	
Minimum Split (s)				7.2	14.5						10.2	
Total Split (s)				16.0	50.0						34.0	
Total Split (%)				16.0%	50.0%						34.0%	
Maximum Green (s)				11.8	45.5						28.8	
Yellow Time (s)				3.0	3.2						3.2	
All-Red Time (s)				1.2	1.3						2.0	
Lost Time Adjust (s)				-1.3	-1.3						-2.0	
Total Lost Time (s)				2.9	3.2						3.2	
Lead/Lag				Lag	Lead							
Lead-Lag Optimize?				Yes	Yes							
Vehicle Extension (s)				3.0	1.0						1.0	
Recall Mode				None	C-Max						Max	
Walk Time (s)					7.0						7.0	
Flash Dont Walk (s)					12.0						15.0	
Pedestrian Calls (#/hr)					0						0	
Act Effct Green (s)				63.1	62.8						30.8	
Actuated g/C Ratio				0.63	0.63						0.31	
v/c Ratio				0.19	0.32						0.44	
Control Delay				0.4	2.9						26.6	
Queue Delay				0.5	0.2						0.0	
Total Delay				0.9	3.1						26.6	
LOS				A	A						C	
Approach Delay					2.7						26.6	
Approach LOS					A						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 70 (70%), Referenced to phase 2:WBT and 6:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 9.3		Intersection LOS: A	
Intersection Capacity Utilization 38.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 44: Commerce St & Losoya St



Lane Group	Ø6	Ø8
Minimum Initial (s)	10.0	5.0
Minimum Split (s)	14.5	9.8
Total Split (s)	66.0	34.0
Total Split (%)	66%	34%
Maximum Green (s)	61.7	29.2
Yellow Time (s)	3.2	3.2
All-Red Time (s)	1.1	1.6
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	1.0	1.0
Recall Mode	C-Max	Max
Walk Time (s)		
Flash Dont Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		

Intersection Summary

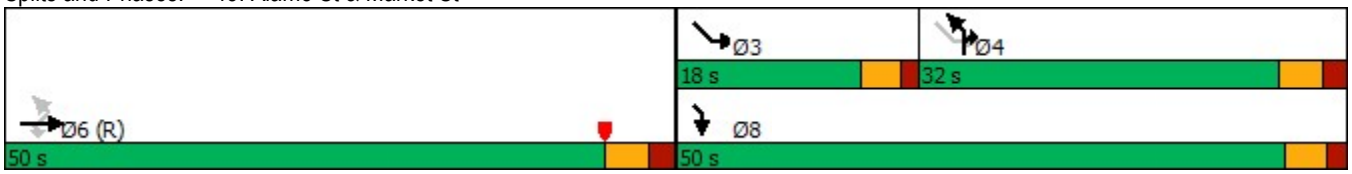


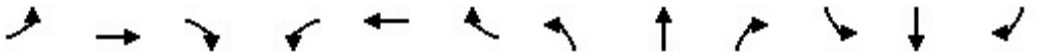
Lane Group	EBL2	EBT	EBR	NBL	NBR	SEL	SER
Lane Configurations							
Traffic Volume (vph)	128	830	93	248	234	377	395
Future Volume (vph)	128	830	93	248	234	377	395
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			50	0	0	0	0
Storage Lanes			1	2	1	2	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	1.00	0.97	1.00	0.97	0.91
Frt			0.850		0.850	0.962	0.850
Flt Protected		0.993		0.950		0.964	
Satd. Flow (prot)	0	3514	1583	3433	1583	3351	1441
Flt Permitted		0.993		0.950		0.608	
Satd. Flow (perm)	0	3514	1583	3433	1583	2114	1441
Right Turn on Red			Yes		Yes		
Satd. Flow (RTOR)			71		72		
Link Speed (mph)		30				30	
Link Distance (ft)		223				161	
Travel Time (s)		5.1				3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	164	1065	119	318	300	484	507
Shared Lane Traffic (%)							32%
Lane Group Flow (vph)	0	1229	119	318	300	646	345
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Right
Median Width(ft)		0				24	
Link Offset(ft)		0				0	
Crosswalk Width(ft)		16				16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15	9	15	9
Number of Detectors	1	1	1	1	1	1	1
Detector Template		Thru	Right		Right	Left	Right
Leading Detector (ft)	0	100	20	0	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0
Detector 1 Size(ft)	0	100	20	0	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Perm	NA	Perm	Prot	Prot	D.P+P	Prot
Protected Phases		6		4	4	3	8
Permitted Phases	6		6			4	
Detector Phase	6	6	6	4	4	3	8
Switch Phase							
Minimum Initial (s)	10.0	10.0	10.0	5.0	5.0	3.0	5.0
Minimum Split (s)	32.3	32.3	32.3	27.2	27.2	7.3	25.8

Lane Group	EBL2	EBT	EBR	NBL	NBR	SEL	SER
Total Split (s)	50.0	50.0	50.0	32.0	32.0	18.0	50.0
Total Split (%)	50.0%	50.0%	50.0%	32.0%	32.0%	18.0%	50.0%
Maximum Green (s)	44.7	44.7	44.7	26.8	26.8	13.7	45.2
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.0	3.2
All-Red Time (s)	2.1	2.1	2.1	2.0	2.0	1.3	1.6
Lost Time Adjust (s)		-1.3	-1.3	0.0	-1.2	-0.3	-0.8
Total Lost Time (s)		4.0	4.0	5.2	4.0	4.0	4.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Recall Mode	C-Min	C-Min	C-Min	Min	Min	Min	Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0
Flash Dont Walk (s)	20.0	20.0	20.0	15.0	15.0		14.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0
Act Effct Green (s)		52.1	52.1	18.5	19.7	35.9	39.9
Actuated g/C Ratio		0.52	0.52	0.18	0.20	0.36	0.40
v/c Ratio		0.67	0.14	0.50	0.81	0.67	0.60
Control Delay		12.6	1.7	38.2	45.4	24.6	25.4
Queue Delay		0.2	0.0	0.0	0.0	0.0	0.6
Total Delay		12.7	1.7	38.2	45.4	24.6	26.0
LOS		B	A	D	D	C	C
Approach Delay		11.8				25.1	
Approach LOS		B				C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 85 (85%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 22.5		Intersection LOS: C	
Intersection Capacity Utilization 67.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 45: Alamo St & Market St





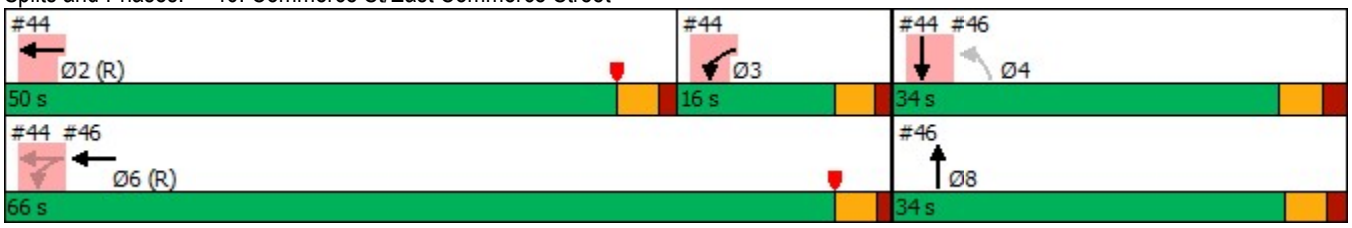
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1000	138	146	267	0	0	0	4
Future Volume (vph)	0	0	0	0	1000	138	146	267	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	0.95	0.95	1.00	1.00	1.00	1.00
Frt					0.982						0.850	
Flt Protected							0.950	0.997				
Satd. Flow (prot)	0	0	0	0	6293	0	1681	1764	0	0	0	0
Flt Permitted							0.950	0.997				
Satd. Flow (perm)	0	0	0	0	6293	0	1681	1764	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					68		87	63			120	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		180			560			263			375	
Travel Time (s)		4.1			12.7			6.0			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	118%	118%	111%	111%	111%	111%	118%	111%	118%	111%
Adj. Flow (vph)	0	0	0	0	1207	167	176	322	0	0	0	5
Shared Lane Traffic (%)							10%					
Lane Group Flow (vph)	0	0	0	0	1374	0	158	340	0	0	5	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2		1	2				
Detector Template					Thru		Left	Thru				
Leading Detector (ft)					100		20	100				
Trailing Detector (ft)					0		0	0				
Detector 1 Position(ft)					0		0	0				
Detector 1 Size(ft)					6		20	6				
Detector 1 Type					Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0		0.0	0.0				
Detector 1 Queue (s)					0.0		0.0	0.0				
Detector 1 Delay (s)					0.0		0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA		custom	NA				
Protected Phases					6			8				

Lane Group	Ø2	Ø3
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Growth Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	2	3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							4					
Detector Phase					6		4	8				
Switch Phase												
Minimum Initial (s)					10.0		5.0	5.0				
Minimum Split (s)					14.5		10.2	9.8				
Total Split (s)					66.0		34.0	34.0				
Total Split (%)					66.0%		34.0%	34.0%				
Maximum Green (s)					61.7		28.8	29.2				
Yellow Time (s)					3.2		3.2	3.2				
All-Red Time (s)					1.1		2.0	1.6				
Lost Time Adjust (s)					-1.7		0.0	0.0				
Total Lost Time (s)					2.6		5.2	4.8				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					1.0		1.0	1.0				
Recall Mode					C-Max		Max	Max				
Walk Time (s)							7.0					
Flash Dont Walk (s)							15.0					
Pedestrian Calls (#/hr)							0					
Act Effct Green (s)					63.4		28.8	29.2			0.0	
Actuated g/C Ratio					0.63		0.29	0.29			0.00	
v/c Ratio					0.34		0.29	0.61			0.04	
Control Delay					8.7		14.6	29.9			0.0	
Queue Delay					0.0		1.0	16.8			0.0	
Total Delay					8.7		15.5	46.7			0.0	
LOS					A		B	D			A	
Approach Delay					8.7			36.8				
Approach LOS					A			D				

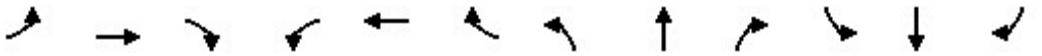
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 70 (70%), Referenced to phase 2:WBT and 6:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 16.1		Intersection LOS: B	
Intersection Capacity Utilization 38.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 46: Commerce St/East Commerce Street



Lane Group	Ø2	Ø3
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	10.0	3.0
Minimum Split (s)	14.5	7.2
Total Split (s)	50.0	16.0
Total Split (%)	50%	16%
Maximum Green (s)	45.5	11.8
Yellow Time (s)	3.2	3.0
All-Red Time (s)	1.3	1.2
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	1.0	3.0
Recall Mode	C-Max	None
Walk Time (s)	7.0	
Flash Dont Walk (s)	12.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		

Intersection Summary



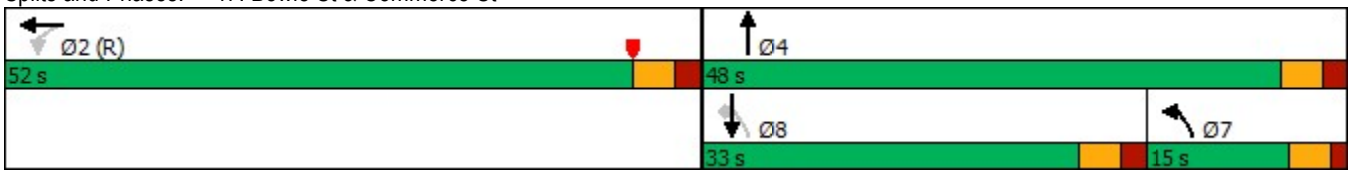
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	139	707	91	88	80	0	0	513	119
Future Volume (vph)	0	0	0	139	707	91	88	80	0	0	513	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	0.95	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor				0.79								
Frt					0.983							0.850
Flt Protected				0.950				0.975				
Satd. Flow (prot)	0	0	0	1770	4999	0	0	3451	0	0	3539	1583
Flt Permitted				0.950				0.576				
Satd. Flow (perm)	0	0	0	1390	4999	0	0	2039	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					31							144
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		305			635			287			349	
Travel Time (s)		6.9			14.4			6.5			7.9	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	168	853	110	106	97	0	0	619	144
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	168	963	0	0	203	0	0	619	144
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	1
Detector Template				Left	Thru		Left	Thru			Thru	Right
Leading Detector (ft)				20	100		0	100			100	20
Trailing Detector (ft)				0	0		0	0			0	0
Detector 1 Position(ft)				0	0		0	0			0	0
Detector 1 Size(ft)				20	6		0	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		D.P+P	NA			NA	Perm
Protected Phases					2		7	4			8	
Permitted Phases				2			8					8
Detector Phase				2	2		7	4			8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0		3.0	5.0			5.0	5.0
Minimum Split (s)				33.3	33.3		7.4	29.1			27.1	27.1
Total Split (s)				52.0	52.0		15.0	48.0			33.0	33.0
Total Split (%)				52.0%	52.0%		15.0%	48.0%			33.0%	33.0%
Maximum Green (s)				46.7	46.7		10.6	42.9			27.9	27.9
Yellow Time (s)				3.2	3.2		3.0	3.2			3.2	3.2
All-Red Time (s)				2.1	2.1		1.4	1.9			1.9	1.9
Lost Time Adjust (s)				-1.3	-1.3			-1.1			-1.1	-1.1
Total Lost Time (s)				4.0	4.0			4.0			4.0	4.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0		1.0	1.0			1.0	1.0
Recall Mode				C-Max	C-Max		Max	Max			Max	Max
Walk Time (s)				7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)				21.0	21.0			17.0			15.0	15.0
Pedestrian Calls (#/hr)				0	0			0			0	0
Act Effct Green (s)				48.0	48.0			44.0			29.0	29.0
Actuated g/C Ratio				0.48	0.48			0.44			0.29	0.29
v/c Ratio				0.25	0.40			0.19			0.60	0.26
Control Delay				16.7	16.7			28.4			33.5	5.9
Queue Delay				0.0	0.0			0.0			0.0	0.0
Total Delay				16.7	16.7			28.4			33.5	5.9
LOS				B	B			C			C	A
Approach Delay					16.7			28.4			28.3	
Approach LOS					B			C			C	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 25 (25%), Referenced to phase 2:WBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.60
Intersection Signal Delay: 22.1 Intersection LOS: C
Intersection Capacity Utilization 48.6% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 47: Bowie St & Commerce St



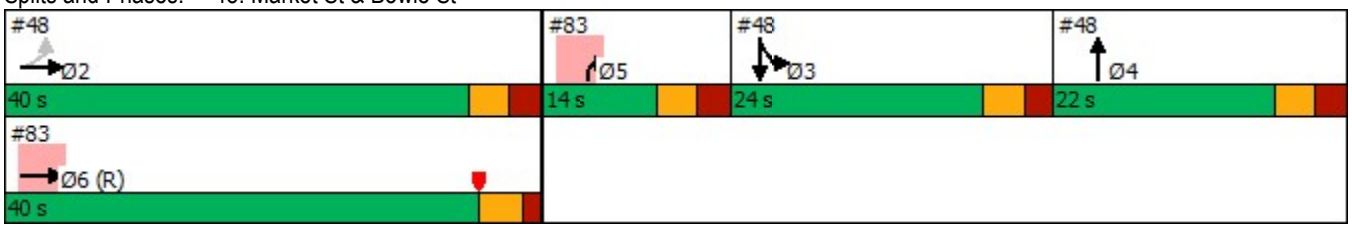
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	162	1029	9	0	0	0	0	42	87	575	30	0
Future Volume (vph)	162	1029	9	0	0	0	0	42	87	575	30	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.999						0.909				
Flt Protected		0.993								0.950	0.957	
Satd. Flow (prot)	0	5045	0	0	0	0	0	1693	0	1681	1694	0
Flt Permitted		0.993								0.950	0.957	
Satd. Flow (perm)	0	5045	0	0	0	0	0	1693	0	1681	1694	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		1										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1147			170			284			287	
Travel Time (s)		26.1			3.9			6.5			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	208	1320	12	0	0	0	0	54	112	738	38	0
Shared Lane Traffic (%)										48%		
Lane Group Flow (vph)	0	1540	0	0	0	0	0	166	0	384	392	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Split	NA	
Protected Phases		2						4		3	3	
Permitted Phases	2											
Detector Phase	2	2						4		3	3	
Switch Phase												

Lane Group	Ø5	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Growth Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	5	6
Permitted Phases		
Detector Phase		
Switch Phase		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0						5.0		5.0	5.0	
Minimum Split (s)	12.0	12.0						12.0		22.0	22.0	
Total Split (s)	40.0	40.0						22.0		24.0	24.0	
Total Split (%)	40.0%	40.0%						22.0%		24.0%	24.0%	
Maximum Green (s)	34.5	34.5						16.5		18.7	18.7	
Yellow Time (s)	3.0	3.0						3.0		3.2	3.2	
All-Red Time (s)	2.5	2.5						2.5		2.1	2.1	
Lost Time Adjust (s)		-0.7						-1.1		-1.3	-1.5	
Total Lost Time (s)		4.8						4.4		4.0	3.8	
Lead/Lag										Lag	Lag	
Lead-Lag Optimize?										Yes	Yes	
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	Max	Max						Max		None	None	
Act Effct Green (s)		35.2						17.6		34.0	34.2	
Actuated g/C Ratio		0.35						0.18		0.34	0.34	
v/c Ratio		0.87						0.56		0.67	0.68	
Control Delay		32.4						45.8		18.2	18.2	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		32.4						45.8		18.2	18.2	
LOS		C						D		B	B	
Approach Delay		32.4						45.8			18.2	
Approach LOS		C						D			B	

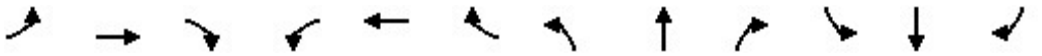
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 18 (18%), Referenced to phase 6:EBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 28.9		Intersection LOS: C	
Intersection Capacity Utilization 67.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 48: Market St & Bowie St



Lane Group	Ø5	Ø6
Minimum Initial (s)	5.0	10.0
Minimum Split (s)	12.0	25.0
Total Split (s)	14.0	40.0
Total Split (%)	14%	40%
Maximum Green (s)	8.5	35.3
Yellow Time (s)	3.0	3.2
All-Red Time (s)	2.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	1.0	1.0
Recall Mode	None	C-Min
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		

Intersection Summary



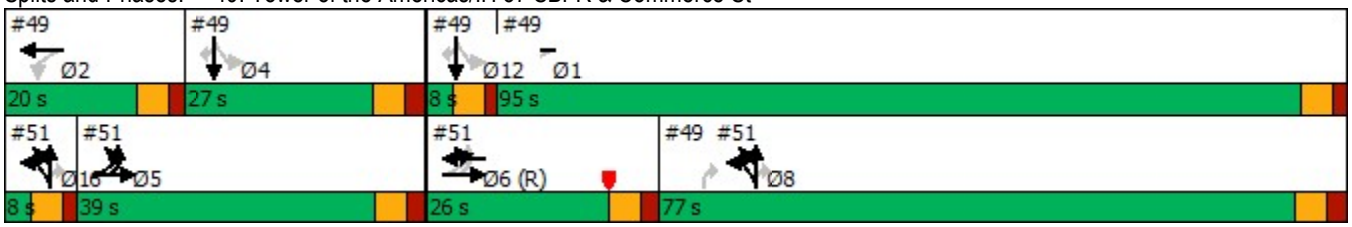
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	123	637	0	0	0	214	84	17	363
Future Volume (vph)	0	0	0	123	637	0	0	0	214	84	17	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt									0.865			0.850
Flt Protected					0.992						0.960	
Satd. Flow (prot)	0	0	0	0	3511	0	0	0	1611	0	3398	1583
Flt Permitted					0.992						0.960	
Satd. Flow (perm)	0	0	0	0	3511	0	0	0	1611	0	3398	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)												262
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		635			283			336			353	
Travel Time (s)		14.4			6.4			7.6			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%
Adj. Flow (vph)	0	0	0	156	810	0	0	0	272	107	22	462
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	966	0	0	0	272	0	129	462
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2				1	1	2	1
Detector Template				Left	Thru				Right	Left	Thru	Right
Leading Detector (ft)				20	100				20	20	100	20
Trailing Detector (ft)				0	0				0	0	0	0
Detector 1 Position(ft)				0	0				0	0	0	0
Detector 1 Size(ft)				20	6				20	20	6	20
Detector 1 Type				Cl+Ex	Cl+Ex				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0				0.0	0.0	0.0	0.0
Detector 1 Queue (s)				0.0	0.0				0.0	0.0	0.0	0.0
Detector 1 Delay (s)				0.0	0.0				0.0	0.0	0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA				Perm	Perm	NA	Perm
Protected Phases					1 2						4 12	
Permitted Phases				1 2					8	4 12		4 12
Detector Phase				1 2	1 2				8	4 12	4 12	4 12
Switch Phase												

Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø12	Ø16
Lane Configurations							
Traffic Volume (vph)							
Future Volume (vph)							
Ideal Flow (vphpl)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Growth Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	12	16
Permitted Phases							
Detector Phase							
Switch Phase							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)									3.0			
Minimum Split (s)									38.0			
Total Split (s)									77.0			
Total Split (%)									51.3%			
Maximum Green (s)									71.0			
Yellow Time (s)									3.6			
All-Red Time (s)									2.4			
Lost Time Adjust (s)									-1.3			
Total Lost Time (s)									4.7			
Lead/Lag									Lag			
Lead-Lag Optimize?									Yes			
Vehicle Extension (s)									3.0			
Recall Mode									Max			
Walk Time (s)									7.0			
Flash Dont Walk (s)									14.0			
Pedestrian Calls (#/hr)									0			
Act Effct Green (s)					111.0				72.3		31.0	31.0
Actuated g/C Ratio					0.74				0.48		0.21	0.21
v/c Ratio					0.37				0.35		0.18	0.86
Control Delay					1.1				25.9		49.9	41.4
Queue Delay					0.5				5.5		0.0	0.0
Total Delay					1.6				31.3		49.9	41.4
LOS					A				C		D	D
Approach Delay					1.6			31.3			43.2	
Approach LOS					A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 31 (21%), Referenced to phase 6:EBWB, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 19.4		Intersection LOS: B	
Intersection Capacity Utilization 57.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 49: Tower of the Americas/IH 37 SBFR & Commerce St



Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø12	Ø16
Minimum Initial (s)	3.0	10.0	3.0	3.0	6.0	1.0	1.0
Minimum Split (s)	37.3	19.3	27.0	37.7	23.7	6.1	7.4
Total Split (s)	95.0	20.0	27.0	39.0	26.0	8.0	8.0
Total Split (%)	63%	13%	18%	26%	17%	5%	5%
Maximum Green (s)	89.7	14.7	21.0	33.3	20.3	2.9	2.9
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.7	1.7	2.4	2.1	2.1	1.5	1.5
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	Max	Max	C-Max	Max	Max
Walk Time (s)		7.0	7.0		7.0		
Flash Dont Walk (s)		7.0	14.0		11.0		
Pedestrian Calls (#/hr)		0	0		0		
Act Effct Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							

Intersection Summary



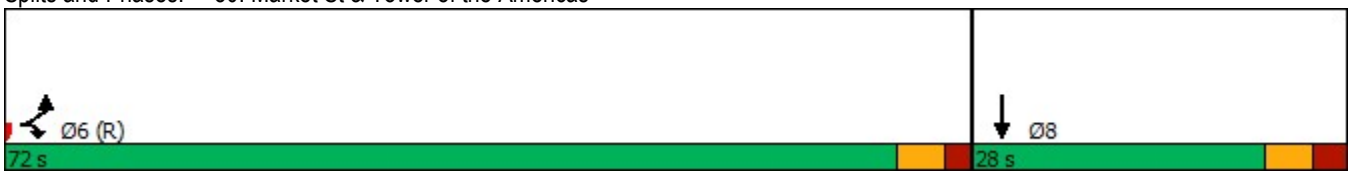
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	192	1465	0	0	142	0
Future Volume (vph)	192	1465	0	0	142	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1770	2787	0	0	3539	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	2787	0	0	3539	0
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	645			629	336	
Travel Time (s)	14.7			14.3	7.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	246	1879	0	0	182	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	246	1879	0	0	182	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1			2	
Detector Template	Left	Right			Thru	
Leading Detector (ft)	20	20			100	
Trailing Detector (ft)	0	0			0	
Detector 1 Position(ft)	0	0			0	
Detector 1 Size(ft)	20	20			6	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	
Detector 2 Position(ft)					94	
Detector 2 Size(ft)					6	
Detector 2 Type					Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)					0.0	
Turn Type	Prot	Prot			NA	
Protected Phases	6	6			8	
Permitted Phases						
Detector Phase	6	6			8	
Switch Phase						



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	10.0	10.0			6.0	
Minimum Split (s)	37.6	37.6			27.3	
Total Split (s)	72.0	72.0			28.0	
Total Split (%)	72.0%	72.0%			28.0%	
Maximum Green (s)	66.4	66.4			21.7	
Yellow Time (s)	3.6	3.6			3.6	
All-Red Time (s)	2.0	2.0			2.7	
Lost Time Adjust (s)	-1.6	-1.6			-2.3	
Total Lost Time (s)	4.0	4.0			4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0	1.0			1.0	
Recall Mode	C-Min	C-Min			None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	25.0	25.0			14.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effct Green (s)	81.0	81.0			11.0	
Actuated g/C Ratio	0.81	0.81			0.11	
v/c Ratio	0.17	0.83			0.47	
Control Delay	2.6	10.4			45.5	
Queue Delay	0.0	1.3			0.0	
Total Delay	2.6	11.7			45.5	
LOS	A	B			D	
Approach Delay	10.6				45.5	
Approach LOS	B				D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2: and 6:EBL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 13.4		Intersection LOS: B	
Intersection Capacity Utilization 72.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 50: Market St & Tower of the Americas





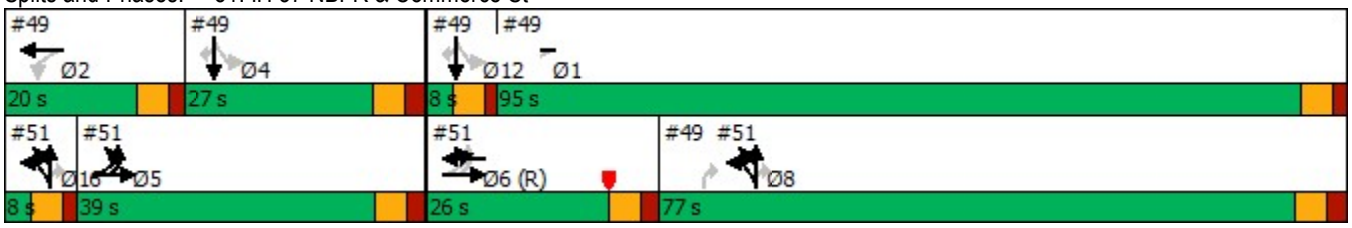
Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR	Ø1	Ø2
Lane Configurations												
Traffic Volume (vph)	93	28	176	335	157	51	432	418	130	92		
Future Volume (vph)	93	28	176	335	157	51	432	418	130	92		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0			86			0		0		
Storage Lanes		1			1			2		1		
Taper Length (ft)		25						25				
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	0.95	0.97	1.00	1.00	1.00		
Frt					0.850					0.850		
Flt Protected		0.950					0.950		0.963			
Satd. Flow (prot)	0	1770	1863	3539	1583	0	3433	0	1794	1583		
Flt Permitted		0.182					0.950		0.963			
Satd. Flow (perm)	0	339	1863	3539	1583	0	3433	0	1794	1583		
Right Turn on Red						Yes				Yes		
Satd. Flow (RTOR)					141					139		
Link Speed (mph)			30	30					30			
Link Distance (ft)			283	712					755			
Travel Time (s)			6.4	16.2					17.2			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%		
Adj. Flow (vph)	118	36	224	426	200	65	549	532	165	117		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	154	224	426	265	0	549	0	697	117		
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Left	Right	Right	Left	Left	Left	Right		
Median Width(ft)			12	12					24			
Link Offset(ft)			0	0					0			
Crosswalk Width(ft)			16	16					16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15	15			9	9	15	15		9		
Number of Detectors	1	1	2	2	1		1	1	2	1		
Detector Template	Left	Left	Thru	Thru	Right		Left		Thru			
Leading Detector (ft)	20	20	100	100	20		20	0	100	0		
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0		
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0		
Detector 1 Size(ft)	20	20	6	6	20		20	0	6	0		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Detector 2 Position(ft)			94	94					94			
Detector 2 Size(ft)			6	6					6			
Detector 2 Type			Cl+Ex	Cl+Ex					Cl+Ex			
Detector 2 Channel												
Detector 2 Extend (s)			0.0	0.0					0.0			
Turn Type	D.P+P	D.P+P	NA	NA	Prot		Split	Split	NA	Perm		
Protected Phases	5	5	5 6	6	6		8 16	8 16	8 16		1	2

Lane Group	Ø4	Ø8	Ø12	Ø16
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Growth Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	4	8	12	16

Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR	Ø1	Ø2
Permitted Phases	6	6								8 16		
Detector Phase	5	5	5 6	6	6		8 16	8 16	8 16	8 16		
Switch Phase												
Minimum Initial (s)	3.0	3.0		6.0	6.0						3.0	10.0
Minimum Split (s)	37.7	37.7		23.7	23.7						37.3	19.3
Total Split (s)	39.0	39.0		26.0	26.0						95.0	20.0
Total Split (%)	26.0%	26.0%		17.3%	17.3%						63%	13%
Maximum Green (s)	33.3	33.3		20.3	20.3						89.7	14.7
Yellow Time (s)	3.6	3.6		3.6	3.6						3.6	3.6
All-Red Time (s)	2.1	2.1		2.1	2.1						1.7	1.7
Lost Time Adjust (s)		-1.7		-1.7	-1.7							
Total Lost Time (s)		4.0		4.0	4.0							
Lead/Lag	Lag	Lag		Lead	Lead						Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes						Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0						3.0	3.0
Recall Mode	Max	Max		C-Max	C-Max						Max	Max
Walk Time (s)				7.0	7.0							7.0
Flash Dont Walk (s)				11.0	11.0							7.0
Pedestrian Calls (#/hr)				0	0							0
Act Effct Green (s)		57.0	61.0	22.0	22.0		81.0		81.0	79.0		
Actuated g/C Ratio		0.38	0.41	0.15	0.15		0.54		0.54	0.53		
v/c Ratio		0.33	0.30	0.82	0.75		0.30		0.72	0.13		
Control Delay		46.3	46.7	75.8	42.5		19.4		31.3	1.8		
Queue Delay		1.5	3.8	2.7	0.0		0.0		0.0	0.0		
Total Delay		47.9	50.5	78.5	42.5		19.4		31.3	1.8		
LOS		D	D	E	D		B		C	A		
Approach Delay			49.4	64.7					24.0			
Approach LOS			D	E					C			

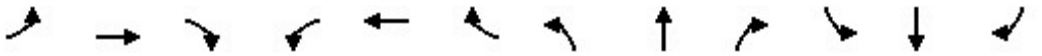
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 31 (21%), Referenced to phase 6:EBWB, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 39.5		Intersection LOS: D	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 51: IH 37 NBFR & Commerce St



Lane Group	Ø4	Ø8	Ø12	Ø16
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	3.0	3.0	1.0	1.0
Minimum Split (s)	27.0	38.0	6.1	7.4
Total Split (s)	27.0	77.0	8.0	8.0
Total Split (%)	18%	51%	5%	5%
Maximum Green (s)	21.0	71.0	2.9	2.9
Yellow Time (s)	3.6	3.6	3.6	3.6
All-Red Time (s)	2.4	2.4	1.5	1.5
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	Max	Max
Walk Time (s)	7.0	7.0		
Flash Dont Walk (s)	14.0	14.0		
Pedestrian Calls (#/hr)	0	0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary

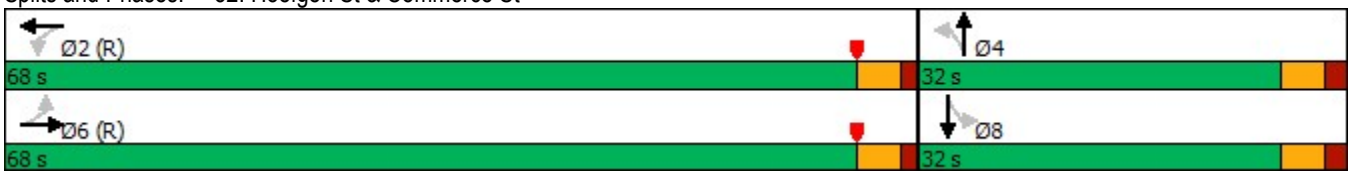


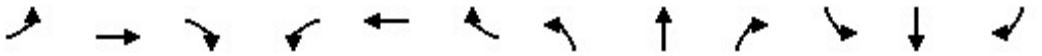
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	216	33	12	431	7	25	9	12	7	3	87
Future Volume (vph)	19	216	33	12	431	7	25	9	12	7	3	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982			0.998			0.913			0.879	
Flt Protected		0.996			0.999		0.950				0.996	
Satd. Flow (prot)	0	3462	0	0	3529	0	1770	1701	0	0	1631	0
Flt Permitted		0.900			0.943		0.488				0.974	
Satd. Flow (perm)	0	3128	0	0	3331	0	909	1701	0	0	1595	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			3			15			111	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		712			691			421			307	
Travel Time (s)		16.2			15.7			9.6			7.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%
Adj. Flow (vph)	24	275	42	15	548	9	32	11	15	9	4	111
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	341	0	0	572	0	32	26	0	0	124	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	0	100		0	100		20	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	0	6		0	6		20	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	22.6	22.6		22.6	22.6		25.0	25.0		25.0	25.0	
Total Split (s)	68.0	68.0		68.0	68.0		32.0	32.0		32.0	32.0	
Total Split (%)	68.0%	68.0%		68.0%	68.0%		32.0%	32.0%		32.0%	32.0%	
Maximum Green (s)	63.4	63.4		63.4	63.4		27.0	27.0		27.0	27.0	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.4	1.4		1.4	1.4		1.8	1.8		1.8	1.8	
Lost Time Adjust (s)		-0.6			-0.6		-1.0	-1.0			-1.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		83.8			83.8		8.2	8.2			8.2	
Actuated g/C Ratio		0.84			0.84		0.08	0.08			0.08	
v/c Ratio		0.13			0.20		0.43	0.17			0.53	
Control Delay		1.5			1.8		61.2	28.0			19.6	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		1.5			1.8		61.2	28.0			19.6	
LOS		A			A		E	C			B	
Approach Delay		1.5			1.8			46.3			19.6	
Approach LOS		A			A			D			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 10 (10%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 6.1		Intersection LOS: A	
Intersection Capacity Utilization 45.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 52: Hoefgen St & Commerce St





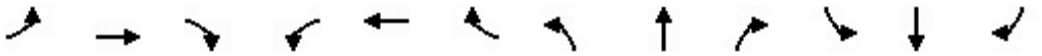
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	199	13	69	286	17	35	86	53	55	288	24
Future Volume (vph)	48	199	13	69	286	17	35	86	53	55	288	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.992			0.993			0.955			0.990	
Flt Protected		0.991			0.991			0.990			0.993	
Satd. Flow (prot)	0	3479	0	0	3483	0	0	3346	0	0	3479	0
Flt Permitted		0.823			0.831			0.770			0.863	
Satd. Flow (perm)	0	2889	0	0	2921	0	0	2603	0	0	3024	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			8			67			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		691			236			259			1425	
Travel Time (s)		15.7			5.4			5.9			32.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%
Adj. Flow (vph)	61	253	17	88	364	22	45	109	67	70	366	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	331	0	0	474	0	0	221	0	0	467	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	0	100		0	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	0	6		0	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		D.P+P	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			6			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0		3.0	10.0		10.0	10.0	
Minimum Split (s)	24.7	24.7		24.7	24.7		7.0	24.9		24.9	24.9	
Total Split (s)	28.0	28.0		28.0	28.0		14.0	32.0		24.9	24.9	
Total Split (%)	41.9%	41.9%		41.9%	41.9%		20.9%	47.8%		37.2%	37.2%	
Maximum Green (s)	23.3	23.3		23.3	23.3		10.0	27.1		20.0	20.0	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.0	3.6		3.6	3.6	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.3		1.3	1.3	
Lost Time Adjust (s)		-0.7			-0.7			-0.9			-0.9	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0			13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)		43.5			43.5			15.4			15.4	
Actuated g/C Ratio		0.65			0.65			0.23			0.23	
v/c Ratio		0.18			0.25			0.34			0.66	
Control Delay		5.4			5.8			15.3			27.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		5.4			5.8			15.3			27.1	
LOS		A			A			B			C	
Approach Delay		5.4			5.8			15.3			27.1	
Approach LOS		A			A			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66.9			
Actuated Cycle Length: 66.9			
Offset: 2 (3%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 13.8		Intersection LOS: B	
Intersection Capacity Utilization 54.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 53: Cherry St & Commerce St



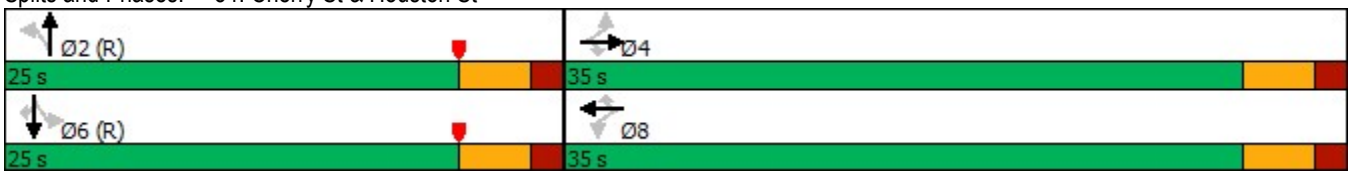


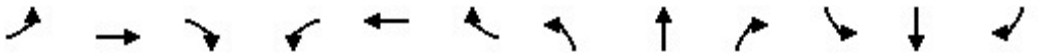
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	217	82	36	139	35	23	155	26	29	265	6
Future Volume (vph)	8	217	82	36	139	35	23	155	26	29	265	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.96		0.99			1.00	0.93
Frt			0.850			0.850		0.981				0.850
Flt Protected		0.998			0.990			0.994			0.995	
Satd. Flow (prot)	0	1859	1583	0	1844	1583	0	3419	0	0	1853	1583
Flt Permitted		0.985			0.780			0.898			0.953	
Satd. Flow (perm)	0	1833	1518	0	1447	1518	0	3081	0	0	1769	1470
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			110			47		30				31
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		480			472			1425			459	
Travel Time (s)		10.9			10.7			32.4			10.4	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	11	290	110	48	186	47	31	207	35	39	354	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	301	110	0	234	47	0	273	0	0	393	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	0	100	0	0	100	20	0	100		0	100	0
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	0	6	0	0	6	20	0	6		0	6	0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8	8	2	2		6	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	22.7	22.7	22.7	22.7	22.7	22.7	21.7	21.7		21.7	21.7	21.7
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	25.0	25.0		25.0	25.0	25.0
Total Split (%)	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	41.7%	41.7%		41.7%	41.7%	41.7%
Maximum Green (s)	30.3	30.3	30.3	30.3	30.3	30.3	20.3	20.3		20.3	20.3	20.3
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2		3.2	3.2	3.2
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	1.5
Lost Time Adjust (s)		-0.7	0.0		-0.7	-0.7		-0.7			-0.7	0.0
Total Lost Time (s)		4.0	4.7		4.0	4.0		4.0			4.0	4.7
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	None	None	None	None	None	C-Min	C-Min		C-Min	C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	10.0	10.0		10.0	10.0	10.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	0
Act Effct Green (s)		15.7	15.0		15.7	15.7		36.3			36.3	35.6
Actuated g/C Ratio		0.26	0.25		0.26	0.26		0.60			0.60	0.59
v/c Ratio		0.63	0.24		0.62	0.11		0.15			0.37	0.01
Control Delay		25.0	5.0		31.7	12.9		5.7			8.3	0.6
Queue Delay		0.0	0.0		0.0	0.0		0.0			0.0	0.0
Total Delay		25.0	5.0		31.7	12.9		5.7			8.3	0.6
LOS		C	A		C	B		A			A	A
Approach Delay		19.6			28.5			5.7			8.2	
Approach LOS		B			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 54 (90%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 15.3		Intersection LOS: B	
Intersection Capacity Utilization 75.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 54: Cherry St & Houston St



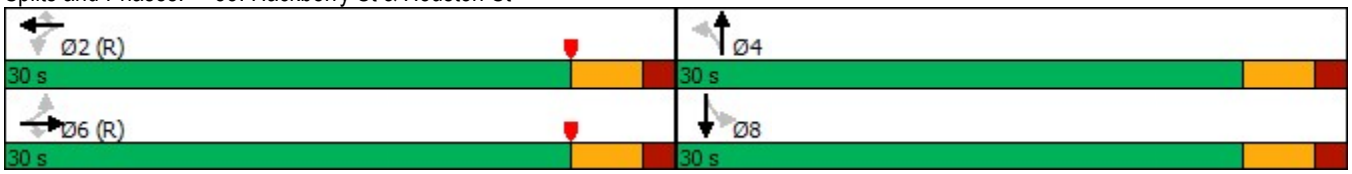


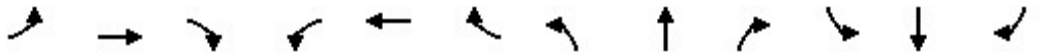
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	226	42	52	172	37	21	195	60	32	221	6
Future Volume (vph)	15	226	42	52	172	37	21	195	60	32	221	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		1.00	0.96		1.00	0.96		0.98			1.00	
Frt			0.850			0.850		0.967			0.997	
Flt Protected		0.997			0.988			0.996			0.994	
Satd. Flow (prot)	0	1857	1583	0	1840	1583	0	3356	0	0	3504	0
Flt Permitted		0.976			0.873			0.901			0.826	
Satd. Flow (perm)	0	1816	1515	0	1619	1515	0	3031	0	0	2900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			54			49		74			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		467			472			521			463	
Travel Time (s)		10.6			10.7			11.8			10.5	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	20	302	56	70	230	49	28	261	80	43	295	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	322	56	0	300	49	0	369	0	0	346	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	0	100	0	0	100	0	0	100		0	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	0	6	0	0	6	0	0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	6.0	6.0		6.0	6.0	
Minimum Split (s)	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7		21.7	21.7	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3		25.3	25.3	
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2		3.2	3.2	
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-0.7	0.0		-0.7	0.0		-0.7			-0.7	
Total Lost Time (s)		4.0	4.7		4.0	4.7		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min	C-Min	C-Min	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	
Act Effct Green (s)		41.1	40.4		41.1	40.4		10.9			10.9	
Actuated g/C Ratio		0.68	0.67		0.68	0.67		0.18			0.18	
v/c Ratio		0.26	0.05		0.27	0.05		0.60			0.65	
Control Delay		1.9	0.5		6.8	2.8		21.7			28.0	
Queue Delay		0.0	0.0		0.0	0.0		0.0			0.0	
Total Delay		1.9	0.5		6.8	2.8		21.7			28.0	
LOS		A	A		A	A		C			C	
Approach Delay		1.7			6.2			21.7			28.0	
Approach LOS		A			A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 55 (92%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 14.2		Intersection LOS: B	
Intersection Capacity Utilization 68.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 55: Hackberry St & Houston St



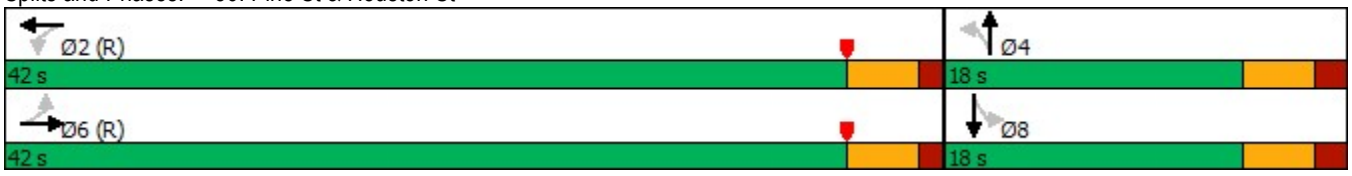


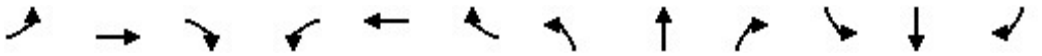
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	286	10	22	236	37	1	40	14	44	85	11
Future Volume (vph)	13	286	10	22	236	37	1	40	14	44	85	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	1.00		0.97	0.99			0.98			0.98	
Frt		0.995			0.980			0.965			0.989	
Flt Protected	0.950			0.950				0.999			0.985	
Satd. Flow (prot)	1770	1849	0	1770	1807	0	0	1765	0	0	1805	0
Flt Permitted	0.533			0.512				0.995			0.881	
Satd. Flow (perm)	961	1849	0	925	1807	0	0	1757	0	0	1593	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			25			19			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		483			2820			472			467	
Travel Time (s)		11.0			64.1			10.7			10.6	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	17	382	13	29	316	49	1	53	19	59	114	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	395	0	29	365	0	0	73	0	0	188	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	20.4	20.4		20.4	20.4		10.7	10.7		10.7	10.7	
Total Split (s)	42.0	42.0		42.0	42.0		18.0	18.0		18.0	18.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	37.6	37.6		37.6	37.6		13.3	13.3		13.3	13.3	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-0.4	-0.4		-0.4	-0.4			-0.4			-0.4	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.3			4.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	9.0	9.0		9.0	9.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	41.0	41.0		41.0	41.0			10.7			10.7	
Actuated g/C Ratio	0.68	0.68		0.68	0.68			0.18			0.18	
v/c Ratio	0.03	0.31		0.05	0.29			0.22			0.65	
Control Delay	5.1	5.6		4.4	4.9			16.9			31.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	5.1	5.6		4.4	4.9			16.9			31.9	
LOS	A	A		A	A			B			C	
Approach Delay		5.6			4.9			16.9			31.9	
Approach LOS		A			A			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 32 (53%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 10.7		Intersection LOS: B	
Intersection Capacity Utilization 45.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 56: Pine St & Houston St



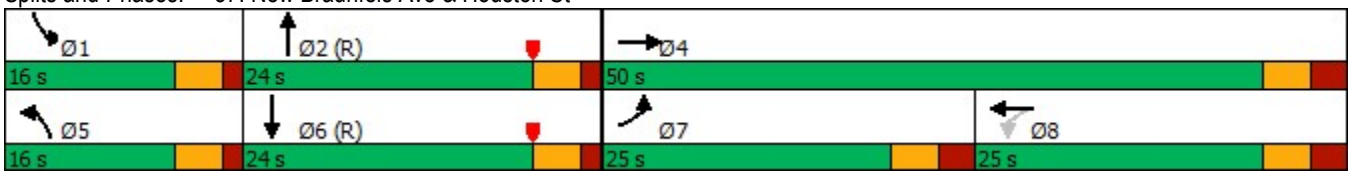


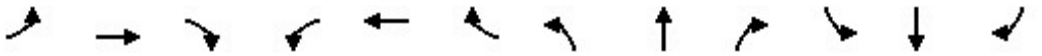
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	173	75	78	160	59	80	385	55	70	487	91
Future Volume (vph)	111	173	75	78	160	59	80	385	55	70	487	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	220		0	220		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.955			0.960			0.981			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1779	0	1770	1788	0	1770	3472	0	1770	3454	0
Flt Permitted	0.950			0.561			0.950			0.950		
Satd. Flow (perm)	1770	1779	0	1045	1788	0	1770	3472	0	1770	3454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		35			19			16			22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2820			1473			922			669	
Travel Time (s)		64.1			33.5			21.0			15.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	148	231	100	104	214	79	107	515	74	94	651	122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	148	331	0	104	293	0	107	589	0	94	773	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases	7	4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				8								
Detector Phase	7	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		3.0	10.0		3.0	10.0	
Minimum Split (s)	8.7	8.7		8.7	8.7		7.6	14.6		7.6	14.6	
Total Split (s)	25.0	50.0		25.0	25.0		16.0	24.0		16.0	24.0	
Total Split (%)	27.8%	55.6%		27.8%	27.8%		17.8%	26.7%		17.8%	26.7%	
Maximum Green (s)	19.3	44.3		19.3	19.3		11.4	19.4		11.4	19.4	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	2.5	2.5		2.5	2.5		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-1.7	-1.7		-1.7	-1.7		-0.6	-0.6		-0.6	-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	0.5	1.0		1.0	1.0		0.5	2.0		0.5	2.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		3.0		3.0	3.0			7.0			7.0	
Flash Dont Walk (s)		2.0		2.0	2.0			12.0			12.0	
Pedestrian Calls (#/hr)		0		0	0			0			0	
Act Effct Green (s)	12.2	35.0		18.7	18.7		8.7	36.5		8.2	36.0	
Actuated g/C Ratio	0.14	0.39		0.21	0.21		0.10	0.41		0.09	0.40	
v/c Ratio	0.62	0.46		0.48	0.76		0.62	0.42		0.58	0.55	
Control Delay	47.2	19.1		33.8	39.6		54.3	23.3		52.9	26.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	47.2	19.1		33.8	39.6		54.3	23.3		52.9	26.3	
LOS	D	B		C	D		D	C		D	C	
Approach Delay		27.7			38.1			28.1			29.1	
Approach LOS		C			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 55 (61%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 30.0		Intersection LOS: C	
Intersection Capacity Utilization 61.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 57: New Braunfels Ave & Houston St





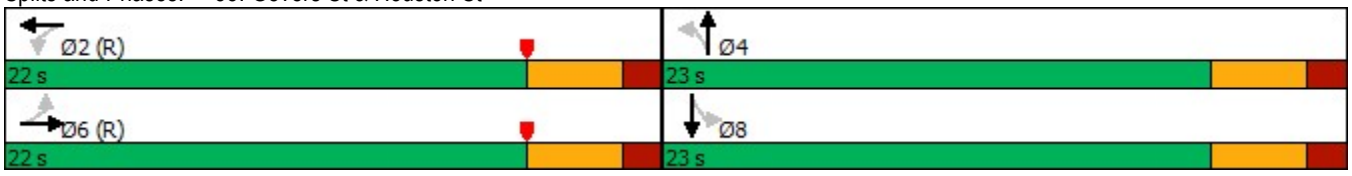
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	294	23	35	249	6	32	37	31	5	35	6
Future Volume (vph)	8	294	23	35	249	6	32	37	31	5	35	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	1.00		0.98	1.00			0.97			0.99	
Frt		0.989			0.996			0.958			0.983	
Flt Protected	0.950			0.950				0.984			0.994	
Satd. Flow (prot)	1770	1834	0	1770	1853	0	0	1725	0	0	1807	0
Flt Permitted	0.556			0.507				0.868			0.966	
Satd. Flow (perm)	1012	1834	0	926	1853	0	0	1505	0	0	1750	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			3			41			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1473			1426			502			301	
Travel Time (s)		33.5			32.4			11.4			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	11	393	31	47	333	8	43	49	41	7	47	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	424	0	47	341	0	0	133	0	0	62	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

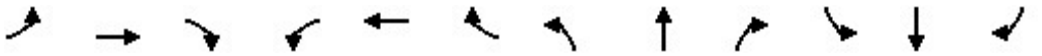
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		22.6	22.6		22.6	22.6	
Total Split (s)	22.0	22.0		22.0	22.0		23.0	23.0		23.0	23.0	
Total Split (%)	48.9%	48.9%		48.9%	48.9%		51.1%	51.1%		51.1%	51.1%	
Maximum Green (s)	17.5	17.5		17.5	17.5		18.4	18.4		18.4	18.4	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3		1.3	1.3		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-0.5	-0.5		-0.5	-0.5			-0.6			-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	32.1	32.1		32.1	32.1			7.8			7.8	
Actuated g/C Ratio	0.71	0.71		0.71	0.71			0.17			0.17	
v/c Ratio	0.02	0.32		0.07	0.26			0.45			0.20	
Control Delay	2.3	3.0		2.2	2.4			17.2			15.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	2.3	3.0		2.2	2.4			17.2			15.3	
LOS	A	A		A	A			B			B	
Approach Delay		2.9			2.4			17.2			15.3	
Approach LOS		A			A			B			B	

Intersection Summary

Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 35 (78%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.45
Intersection Signal Delay: 5.3 Intersection LOS: A
Intersection Capacity Utilization 54.1% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 58: Gevers St & Houston St





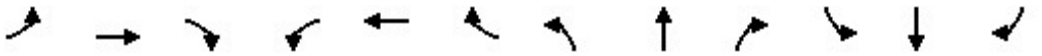
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	211	27	13	194	67	13	292	19	99	429	53
Future Volume (vph)	59	211	27	13	194	67	13	292	19	99	429	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor	0.99	1.00		0.99	0.99			1.00			0.99	
Frt		0.983			0.961			0.991			0.986	
Flt Protected	0.950			0.950				0.998			0.992	
Satd. Flow (prot)	1770	1824	0	1770	1775	0	0	3489	0	0	3444	0
Flt Permitted	0.497			0.530				0.915			0.797	
Satd. Flow (perm)	915	1824	0	975	1775	0	0	3198	0	0	2758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			52			15			26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1426			746			543			299	
Travel Time (s)		32.4			17.0			12.3			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	79	282	36	17	259	90	17	390	25	132	574	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	318	0	17	349	0	0	432	0	0	777	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.7	14.7		14.7	14.7		14.8	14.8		14.8	14.8	
Total Split (s)	25.0	25.0		25.0	25.0		20.0	20.0		20.0	20.0	
Total Split (%)	55.6%	55.6%		55.6%	55.6%		44.4%	44.4%		44.4%	44.4%	
Maximum Green (s)	20.3	20.3		20.3	20.3		15.2	15.2		15.2	15.2	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.2	1.2		1.2	1.2	
Lost Time Adjust (s)	-0.7	-0.7		-0.7	-0.7			-0.8			-0.8	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	20.1	20.1		20.1	20.1			16.9			16.9	
Actuated g/C Ratio	0.45	0.45		0.45	0.45			0.38			0.38	
v/c Ratio	0.19	0.38		0.04	0.42			0.36			0.74	
Control Delay	8.4	8.1		9.9	11.5			10.3			16.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	8.4	8.1		9.9	11.5			10.3			16.3	
LOS	A	A		A	B			B			B	
Approach Delay		8.2			11.4			10.3			16.3	
Approach LOS		A			B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 5 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 12.5		Intersection LOS: B	
Intersection Capacity Utilization 74.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 59: Walters St & Houston St



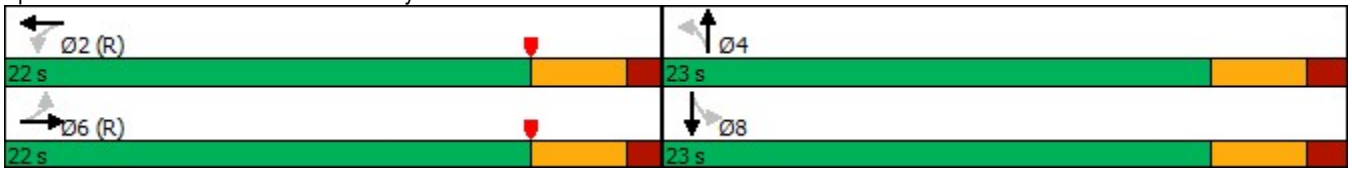


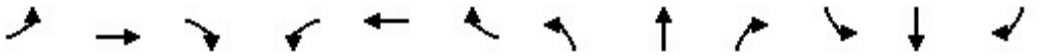
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	291	31	20	244	24	20	41	11	22	25	26
Future Volume (vph)	19	291	31	20	244	24	20	41	11	22	25	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	0.99		0.98	0.99			0.98			0.97	
Frt		0.986			0.987			0.979			0.951	
Flt Protected	0.950			0.950				0.986			0.985	
Satd. Flow (prot)	1770	1826	0	1770	1829	0	0	1782	0	0	1709	0
Flt Permitted	0.547			0.511				0.928			0.924	
Satd. Flow (perm)	996	1826	0	934	1829	0	0	1662	0	0	1588	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			13			15			35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		799			1332			494			300	
Travel Time (s)		18.2			30.3			11.2			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	25	389	41	27	326	32	27	55	15	29	33	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	430	0	27	358	0	0	97	0	0	97	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	21.4	21.4		21.4	21.4		22.6	22.6		22.6	22.6	
Total Split (s)	22.0	22.0		22.0	22.0		23.0	23.0		23.0	23.0	
Total Split (%)	48.9%	48.9%		48.9%	48.9%		51.1%	51.1%		51.1%	51.1%	
Maximum Green (s)	17.6	17.6		17.6	17.6		18.4	18.4		18.4	18.4	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-0.4	-0.4		-0.4	-0.4			-0.6			-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	35.5	35.5		35.5	35.5			7.4			7.4	
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.16			0.16	
v/c Ratio	0.03	0.30		0.04	0.25			0.34			0.34	
Control Delay	2.4	2.5		3.3	3.4			17.8			14.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	2.4	2.5		3.3	3.4			17.8			14.9	
LOS	A	A		A	A			B			B	
Approach Delay		2.5			3.3			17.8			14.9	
Approach LOS		A			A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 5 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 5.4		Intersection LOS: A	
Intersection Capacity Utilization 40.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 60: Mel Waiters Way/Rio Grande & Houston St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	290	39	118	350	65	21	1	94	2	4	4
Future Volume (vph)	28	290	39	118	350	65	21	1	94	2	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		0	250		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.982			0.976				0.850		0.942	
Flt Protected	0.950			0.950				0.954			0.989	
Satd. Flow (prot)	1770	3476	0	1770	3454	0	0	1777	1583	0	3297	0
Flt Permitted	0.444			0.497							0.890	
Satd. Flow (perm)	827	3476	0	926	3454	0	0	1863	1583	0	2967	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			28				157		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1094			1140			730			346	
Travel Time (s)		24.9			25.9			16.6			7.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	37	388	52	158	468	87	28	1	126	3	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	440	0	158	555	0	0	29	126	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	2	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Thru	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	100	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	6	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94	94		94	
Detector 2 Size(ft)		6			6			6	6		6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0	0.0		0.0	
Turn Type	D.P+P	NA		Perm	NA		Perm	NA	Free	Perm	NA	
Protected Phases	1	6			2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			2			4		Free	8		
Detector Phase	1	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	7.2	27.1		15.1	15.1		29.2	29.2		29.2	29.2	
Total Split (s)	20.0	50.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	25.0%	62.5%		37.5%	37.5%		37.5%	37.5%		37.5%	37.5%	
Maximum Green (s)	15.8	44.9		24.9	24.9		24.8	24.8		24.8	24.8	
Yellow Time (s)	3.0	3.9		3.9	3.9		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-0.2	-1.1		-1.1	-1.1			-1.2			-1.2	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	0.5	1.5		1.5	1.5		1.0	1.0		1.0	1.0	
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)		7.0					7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0					17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)		0					0	0		0	0	
Act Effct Green (s)	68.8	73.6		68.3	68.3			7.5	80.0		7.5	
Actuated g/C Ratio	0.86	0.92		0.85	0.85			0.09	1.00		0.09	
v/c Ratio	0.05	0.14		0.20	0.19			0.17	0.08		0.05	
Control Delay	1.5	1.0		3.6	2.5			35.6	0.1		27.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	1.5	1.0		3.6	2.5			35.6	0.1		27.1	
LOS	A	A		A	A			D	A		C	
Approach Delay		1.0			2.7			6.7			27.1	
Approach LOS		A			A			A			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 10 (13%), Referenced to phase 2:EBWB and 6:EBT, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.20			
Intersection Signal Delay: 2.8		Intersection LOS: A	
Intersection Capacity Utilization 37.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 61: Coca-Cola Pl & Houston St



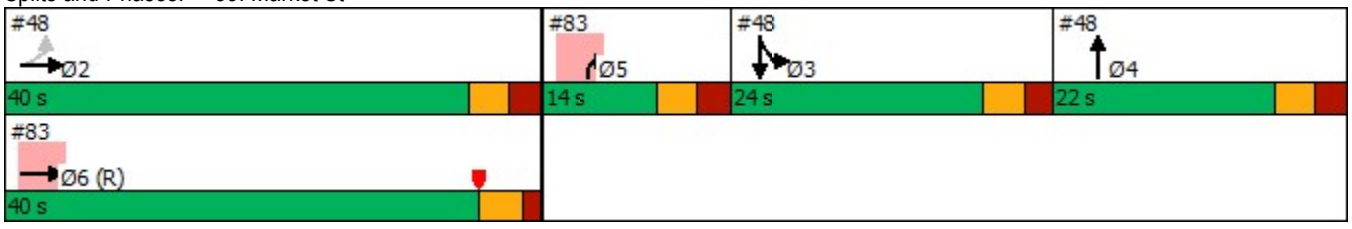


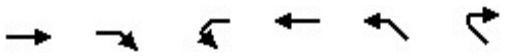
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø3	Ø4
Lane Configurations									
Traffic Volume (vph)	0	0	0	0	0	0			
Future Volume (vph)	0	0	0	0	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Lane Util. Factor	0.91	1.00	1.00	1.00	1.00	1.00			
Frt									
Flt Protected									
Satd. Flow (prot)	5085	0	0	0	0	1863			
Flt Permitted									
Satd. Flow (perm)	5085	0	0	0	0	1863			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)									
Link Speed (mph)	30			30	30				
Link Distance (ft)	170			645	201				
Travel Time (s)	3.9			14.7	4.6				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Growth Factor	118%	118%	118%	118%	118%	118%			
Adj. Flow (vph)	0	0	0	0	0	0			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	0	0	0	0			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	0			0	0				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)		9	15		15	9			
Number of Detectors	2					1			
Detector Template	Thru					Right			
Leading Detector (ft)	100					20			
Trailing Detector (ft)	0					0			
Detector 1 Position(ft)	0					0			
Detector 1 Size(ft)	6					20			
Detector 1 Type	Cl+Ex					Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0					0.0			
Detector 1 Queue (s)	0.0					0.0			
Detector 1 Delay (s)	0.0					0.0			
Detector 2 Position(ft)	94								
Detector 2 Size(ft)	6								
Detector 2 Type	Cl+Ex								
Detector 2 Channel									
Detector 2 Extend (s)	0.0								
Turn Type						Prot			
Protected Phases	6					5	2	3	4
Permitted Phases									
Detector Phase	6					5			
Switch Phase									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø3	Ø4
Minimum Initial (s)	10.0					5.0	5.0	5.0	5.0
Minimum Split (s)	25.0					12.0	12.0	22.0	12.0
Total Split (s)	40.0					14.0	40.0	24.0	22.0
Total Split (%)	40.0%					14.0%	40%	24%	22%
Maximum Green (s)	35.3					8.5	34.5	18.7	16.5
Yellow Time (s)	3.2					3.0	3.0	3.2	3.0
All-Red Time (s)	1.5					2.5	2.5	2.1	2.5
Lost Time Adjust (s)	0.0					0.0			
Total Lost Time (s)	4.7					5.5			
Lead/Lag						Lead		Lag	
Lead-Lag Optimize?						Yes		Yes	
Vehicle Extension (s)	1.0					1.0	1.0	1.0	1.0
Recall Mode	C-Min					None	Max	None	Max
Act Effct Green (s)									
Actuated g/C Ratio									
v/c Ratio									
Control Delay									
Queue Delay									
Total Delay									
LOS									
Approach Delay									
Approach LOS									

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 18 (18%), Referenced to phase 6:EBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 0.0		Intersection LOS: A	
Intersection Capacity Utilization 0.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 83: Market St





Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	556	0	1059	0	0
Future Volume (vph)	0	556	0	1059	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	463			1217	1130	
Travel Time (s)	10.5			27.7	25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	604	0	1151	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	604	0	1151	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.6%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	266	541	203	12	115	320	97	261	898	164	147	645
Future Volume (vph)	266	541	203	12	115	320	97	261	898	164	147	645
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	220		220		240		240	230		0	220	
Storage Lanes	0		1		0		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91
Frt		0.959				0.965			0.977			0.971
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1770	3394	0	0	1770	3415	0	1770	4968	0	1770	4938
Flt Permitted	0.950				0.950			0.140			0.119	
Satd. Flow (perm)	1770	3394	0	0	1770	3415	0	261	4968	0	222	4938
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		41				27			28			39
Link Speed (mph)		30				30			30			30
Link Distance (ft)		692				643			879			693
Travel Time (s)		15.7				14.6			20.0			15.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	321	653	245	14	139	386	117	315	1083	198	177	778
Shared Lane Traffic (%)												
Lane Group Flow (vph)	321	898	0	0	153	503	0	315	1281	0	177	966
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	2		1	2
Detector Template	Left	Thru			Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	100		0	20	100		20	100		20	100
Trailing Detector (ft)	0	0		0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0		0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6		0	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94				94			94			94
Detector 2 Size(ft)		6				6			6			6
Detector 2 Type		Cl+Ex				Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0			0.0			0.0
Turn Type	Prot	NA		Prot	Prot	NA		pm+pt	NA		pm+pt	NA
Protected Phases	7	4		3	3	8		5	2		1	6

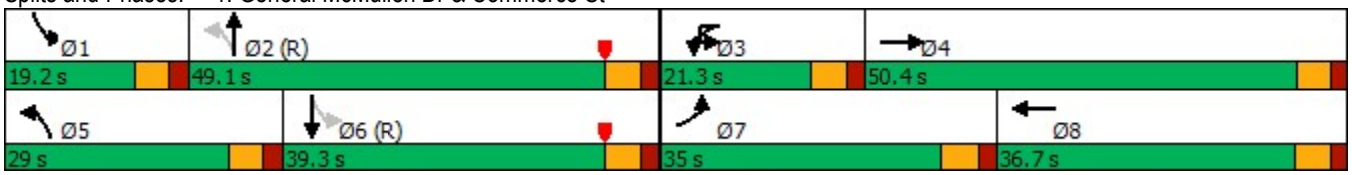


Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	156
Future Volume (vph)	156
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.91
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.92
Growth Factor	111%
Adj. Flow (vph)	188
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Permitted Phases								2			6	
Detector Phase	7	4		3	3	8		5	2		1	6
Switch Phase												
Minimum Initial (s)	3.0	6.0		3.0	3.0	6.0		3.0	10.0		3.0	10.0
Minimum Split (s)	8.7	37.4		8.7	8.7	36.7		8.7	37.7		8.7	37.7
Total Split (s)	35.0	50.4		21.3	21.3	36.7		29.0	49.1		19.2	39.3
Total Split (%)	25.0%	36.0%		15.2%	15.2%	26.2%		20.7%	35.1%		13.7%	28.1%
Maximum Green (s)	29.3	45.0		15.6	15.6	31.0		23.3	43.4		13.5	33.6
Yellow Time (s)	3.9	3.6		3.9	3.9	3.9		3.6	3.6		3.6	3.6
All-Red Time (s)	1.8	1.8		1.8	1.8	1.8		2.1	2.1		2.1	2.1
Lost Time Adjust (s)	-0.7	-1.7			-0.7	-1.7		-0.8	-1.7		-0.8	-1.7
Total Lost Time (s)	5.0	3.7			5.0	4.0		4.9	4.0		4.9	4.0
Lead/Lag	Lead	Lag		Lead	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.0	1.0		1.0	1.0	1.0		1.0	1.0		1.0	1.0
Recall Mode	None	None		None	None	None		None	C-Min		None	C-Min
Walk Time (s)		7.0				7.0			7.0			7.0
Flash Dont Walk (s)		25.0				24.0			25.0			25.0
Pedestrian Calls (#/hr)		0				0			0			0
Act Effct Green (s)	27.9	41.2			14.8	27.8		70.4	52.7		56.8	44.0
Actuated g/C Ratio	0.20	0.29			0.11	0.20		0.50	0.38		0.41	0.31
v/c Ratio	0.91	0.87			0.82	0.72		0.85	0.68		0.73	0.61
Control Delay	84.7	54.6			92.0	52.3		50.1	39.4		48.8	42.9
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	84.7	54.6			92.0	52.3		50.1	39.4		48.8	42.9
LOS	F	D			F	D		D	D		D	D
Approach Delay		62.5				61.5			41.5			43.8
Approach LOS		E				E			D			D

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow, Master Intersection			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 50.5		Intersection LOS: D	
Intersection Capacity Utilization 80.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: General McMullen Dr & Commerce St





Lane Group	SBR
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

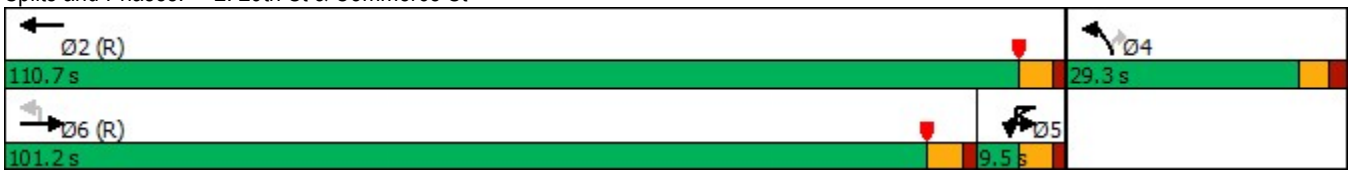
Intersection Summary

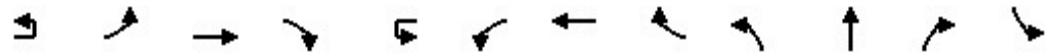
Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (vph)	61	849	15	20	22	536	2	33
Future Volume (vph)	61	849	15	20	22	536	2	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150		150		135	0
Storage Lanes	0		0		1		1	1
Taper Length (ft)	25				25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							0.91	0.89
Frt		0.998						0.850
Flt Protected		0.997			0.950		0.950	
Satd. Flow (prot)	0	1853	0	0	1770	1863	1770	1583
Flt Permitted		0.916			0.950		0.950	
Satd. Flow (perm)	0	1703	0	0	1770	1863	1615	1416
Right Turn on Red			Yes					Yes
Satd. Flow (RTOR)		1						40
Link Speed (mph)		30				30	30	
Link Distance (ft)		330				293	530	
Travel Time (s)		7.5				6.7	12.0	
Confl. Peds. (#/hr)							30	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	74	1024	18	24	27	647	2	40
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1116	0	0	51	647	2	40
Enter Blocked Intersection	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)		12				12	12	
Link Offset(ft)		0				0	0	
Crosswalk Width(ft)		16				16	16	
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9		9	9	15		15	9
Number of Detectors	1	2		1	1	2	1	1
Detector Template		Thru			Left	Thru	Left	Right
Leading Detector (ft)	0	100		0	20	100	20	20
Trailing Detector (ft)	0	0		0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0
Detector 1 Size(ft)	0	6		0	20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94		
Detector 2 Size(ft)		6				6		
Detector 2 Type		Cl+Ex				Cl+Ex		
Detector 2 Channel								
Detector 2 Extend (s)		0.0				0.0		

Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Turn Type	Perm	NA		Prot	Prot	NA	Prot	Perm
Protected Phases		6		5	5	2	4	
Permitted Phases	6							4
Detector Phase	6	6		5	5	2	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0		3.0	3.0	10.0	3.0	3.0
Minimum Split (s)	19.1	19.1		8.1	8.1	15.1	29.3	29.3
Total Split (s)	101.2	101.2		9.5	9.5	110.7	29.3	29.3
Total Split (%)	72.3%	72.3%		6.8%	6.8%	79.1%	20.9%	20.9%
Maximum Green (s)	96.1	96.1		4.4	4.4	105.6	24.0	24.0
Yellow Time (s)	3.6	3.6		3.6	3.6	3.6	3.2	3.2
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5	2.1	2.1
Lost Time Adjust (s)		-0.6			-0.5	-0.6	-1.3	0.0
Total Lost Time (s)		4.5			4.6	4.5	4.0	5.3
Lead/Lag	Lead	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes			
Vehicle Extension (s)	1.0	1.0		0.5	0.5	1.0	1.0	1.0
Recall Mode	C-Min	C-Min		None	None	C-Min	None	None
Walk Time (s)	7.0	7.0					7.0	7.0
Flash Dont Walk (s)	7.0	7.0					17.0	17.0
Pedestrian Calls (#/hr)	0	0					0	0
Act Effct Green (s)		116.4			6.2	128.2	6.0	4.7
Actuated g/C Ratio		0.83			0.04	0.92	0.04	0.03
v/c Ratio		0.79			0.65	0.38	0.03	0.47
Control Delay		11.1			90.4	2.1	63.5	35.9
Queue Delay		0.2			0.0	0.1	0.0	0.0
Total Delay		11.3			90.4	2.3	63.5	35.9
LOS		B			F	A	E	D
Approach Delay		11.3				8.7	37.2	
Approach LOS		B				A	D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 26 (19%), Referenced to phase 2:WBT and 6:EBTU, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 10.9		Intersection LOS: B	
Intersection Capacity Utilization 112.1%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: 29th St & Commerce St





Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	37	99	779	2	44	4	454	92	5	10	5	77
Future Volume (vph)	37	99	779	2	44	4	454	92	5	10	5	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		150		130		150	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor										0.96		
Frt							0.975			0.966		
Flt Protected		0.950				0.950				0.988		
Satd. Flow (prot)	0	1770	1863	0	0	1770	1816	0	0	1732	0	0
Flt Permitted		0.950				0.950				0.930		
Satd. Flow (perm)	0	1770	1863	0	0	1770	1816	0	0	1602	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)							12			6		
Link Speed (mph)			30				30			30		
Link Distance (ft)			334				512			484		
Travel Time (s)			7.6				11.6			11.0		
Confl. Peds. (#/hr)									30		30	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	45	119	940	2	53	5	548	111	6	12	6	93
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	164	942	0	0	58	659	0	0	24	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2		1
Detector Template		Left	Thru			Left	Thru		Left	Thru		Left
Leading Detector (ft)	0	20	100		0	20	100		0	100		0
Trailing Detector (ft)	0	0	0		0	0	0		0	0		0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0		0
Detector 1 Size(ft)	0	20	6		0	20	6		0	6		0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

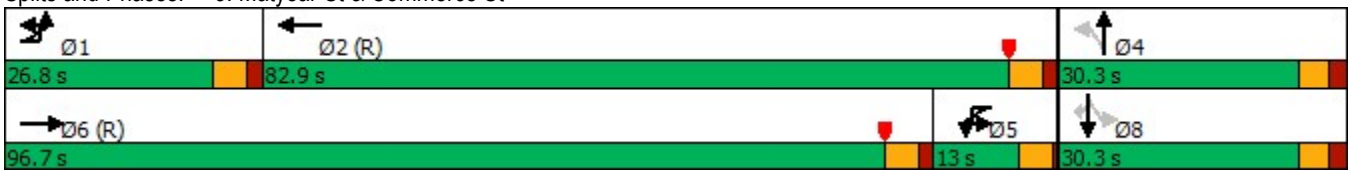
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	4	55
Future Volume (vph)	4	55
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		120
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.92	0.90
Frt		0.850
Flt Protected	0.955	
Satd. Flow (prot)	1779	1583
Flt Permitted	0.781	
Satd. Flow (perm)	1343	1421
Right Turn on Red		Yes
Satd. Flow (RTOR)		96
Link Speed (mph)	30	
Link Distance (ft)	302	
Travel Time (s)	6.9	
Confl. Peds. (#/hr)		30
Peak Hour Factor	0.92	0.92
Growth Factor	111%	111%
Adj. Flow (vph)	5	66
Shared Lane Traffic (%)		
Lane Group Flow (vph)	98	66
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	
Leading Detector (ft)	100	0
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	0
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	

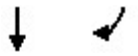
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Perm	NA		Perm
Protected Phases	1	1	6		5	5	2			4		
Permitted Phases									4			8
Detector Phase	1	1	6		5	5	2		4	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		5.0	5.0	10.0		6.0	6.0		6.0
Minimum Split (s)	8.1	8.1	37.1		9.0	9.0	19.1		30.3	30.3		30.3
Total Split (s)	26.8	26.8	96.7		13.0	13.0	82.9		30.3	30.3		30.3
Total Split (%)	19.1%	19.1%	69.1%		9.3%	9.3%	59.2%		21.6%	21.6%		21.6%
Maximum Green (s)	21.7	21.7	91.6		9.0	9.0	77.8		25.0	25.0		25.0
Yellow Time (s)	3.6	3.6	3.6		3.5	3.5	3.6		3.2	3.2		3.2
All-Red Time (s)	1.5	1.5	1.5		0.5	0.5	1.5		2.1	2.1		2.1
Lost Time Adjust (s)		-0.2	-0.6			-0.6	-0.6			-1.3		
Total Lost Time (s)		4.9	4.5			3.4	4.5			4.0		
Lead/Lag	Lead	Lead	Lead		Lag	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	1.0	1.0	1.0		3.0	3.0	1.0		1.0	1.0		1.0
Recall Mode	None	None	C-Min		None	None	C-Min		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Dont Walk (s)			7.0				7.0		18.0	18.0		18.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		16.5	103.3			11.0	94.2			15.8		
Actuated g/C Ratio		0.12	0.74			0.08	0.67			0.11		
v/c Ratio		0.79	0.69			0.42	0.54			0.13		
Control Delay		85.5	8.8			54.4	7.5			44.2		
Queue Delay		0.0	0.6			0.0	0.0			0.0		
Total Delay		85.5	9.4			54.4	7.5			44.2		
LOS		F	A			D	A			D		
Approach Delay			20.7				11.3			44.2		
Approach LOS			C				B			D		

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 46 (33%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 19.9 Intersection LOS: B
Intersection Capacity Utilization 87.2% ICU Level of Service E
Analysis Period (min) 15

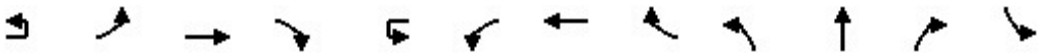
Splits and Phases: 3: Matyear St & Commerce St





Lane Group	SBT	SBR
Turn Type	NA	Perm
Protected Phases	8	
Permitted Phases		8
Detector Phase	8	8
Switch Phase		
Minimum Initial (s)	6.0	6.0
Minimum Split (s)	30.3	30.3
Total Split (s)	30.3	30.3
Total Split (%)	21.6%	21.6%
Maximum Green (s)	25.0	25.0
Yellow Time (s)	3.2	3.2
All-Red Time (s)	2.1	2.1
Lost Time Adjust (s)	-1.3	0.0
Total Lost Time (s)	4.0	5.3
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	1.0	1.0
Recall Mode	None	None
Walk Time (s)	7.0	7.0
Flash Dont Walk (s)	18.0	18.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)	15.8	14.5
Actuated g/C Ratio	0.11	0.10
v/c Ratio	0.65	0.28
Control Delay	77.6	6.6
Queue Delay	0.0	0.0
Total Delay	77.6	6.6
LOS	E	A
Approach Delay	49.0	
Approach LOS	D	

Intersection Summary



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	62	219	500	105	11	57	324	69	83	333	57	81
Future Volume (vph)	62	219	500	105	11	57	324	69	83	333	57	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		122		150		120	128		0	147
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		0.97	0.99			0.98	0.99		0.96	0.98		0.97
Frt			0.974				0.974			0.978		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1770	1794	0	0	1770	1792	0	1770	3404	0	1770
Flt Permitted		0.950				0.950			0.185			0.192
Satd. Flow (perm)	0	1715	1794	0	0	1734	1792	0	332	3404	0	345
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			12				8			12		
Link Speed (mph)			30				30			30		
Link Distance (ft)			545				414			490		
Travel Time (s)			12.4				9.4			11.1		
Confl. Peds. (#/hr)		30		30		30		30	30		30	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	75	264	603	127	13	69	391	83	100	402	69	98
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	339	730	0	0	82	474	0	100	471	0	98
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2		1
Detector Template		Left	Thru			Left	Thru		Left	Thru		Left
Leading Detector (ft)	0	20	100		0	20	100		20	100		20
Trailing Detector (ft)	0	0	0		0	0	0		0	0		0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0		0
Detector 1 Size(ft)	0	20	6		0	20	6		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

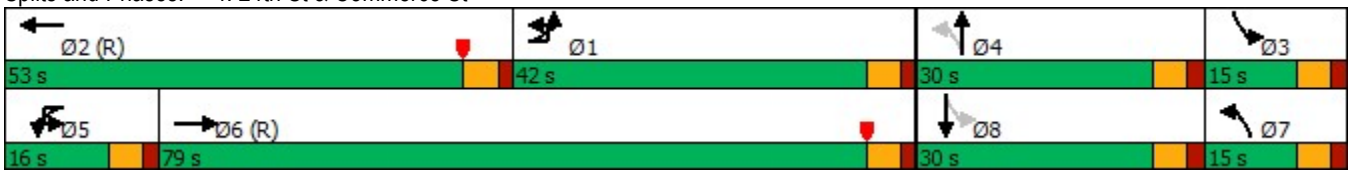
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	261	118
Future Volume (vph)	261	118
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		115
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	0.96	
Frt	0.953	
Flt Protected		
Satd. Flow (prot)	3254	0
Flt Permitted		
Satd. Flow (perm)	3254	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	45	
Link Speed (mph)	30	
Link Distance (ft)	331	
Travel Time (s)	7.5	
Confl. Peds. (#/hr)		30
Peak Hour Factor	0.92	0.92
Growth Factor	111%	111%
Adj. Flow (vph)	315	142
Shared Lane Traffic (%)		
Lane Group Flow (vph)	457	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Turn Type	Prot	Prot	NA		Prot	Prot	NA		pm+pt	NA		pm+pt
Protected Phases	1	1	6		5	5	2		7	4		3
Permitted Phases									4			8
Detector Phase	1	1	6		5	5	2		7	4		3
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		3.0	3.0	10.0		3.0	6.0		3.0
Minimum Split (s)	8.2	8.2	28.2		8.2	8.2	26.2		8.5	27.5		8.5
Total Split (s)	42.0	42.0	79.0		16.0	16.0	53.0		15.0	30.0		15.0
Total Split (%)	30.0%	30.0%	56.4%		11.4%	11.4%	37.9%		10.7%	21.4%		10.7%
Maximum Green (s)	36.8	36.8	73.8		10.8	10.8	47.8		9.5	24.5		9.5
Yellow Time (s)	3.6	3.6	3.6		3.6	3.6	3.6		3.6	3.6		3.6
All-Red Time (s)	1.6	1.6	1.6		1.6	1.6	1.6		1.9	1.9		1.9
Lost Time Adjust (s)		0.0	-1.1			0.0	-1.1		0.0	-1.1		0.0
Total Lost Time (s)		5.2	4.1			5.2	4.1		5.5	4.4		5.5
Lead/Lag	Lag	Lag	Lag		Lead	Lead	Lead		Lag	Lead		Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	0.5	0.5	1.0		0.5	0.5	1.0		0.5	1.0		0.5
Recall Mode	None	None	C-Min		None	None	C-Min		None	None		None
Walk Time (s)			7.0				7.0			7.0		
Flash Dont Walk (s)			16.0				14.0			15.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		29.4	83.1			8.8	62.5		28.6	22.7		27.0
Actuated g/C Ratio		0.21	0.59			0.06	0.45		0.20	0.16		0.19
v/c Ratio		0.91	0.68			0.74	0.59		0.72	0.84		0.76
Control Delay		70.0	17.5			98.8	35.1		82.9	69.2		89.1
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay		70.0	17.5			98.8	35.1		82.9	69.2		89.1
LOS		E	B			F	D		F	E		F
Approach Delay			34.2				44.5			71.6		
Approach LOS			C				D			E		

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 14 (10%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 51.2 Intersection LOS: D
Intersection Capacity Utilization 78.8% ICU Level of Service D
Analysis Period (min) 15

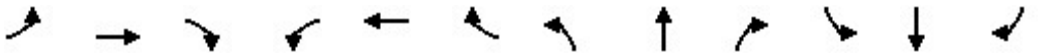
Splits and Phases: 4: 24th St & Commerce St





Lane Group	SBT	SBR
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	27.5	
Total Split (s)	30.0	
Total Split (%)	21.4%	
Maximum Green (s)	24.5	
Yellow Time (s)	3.6	
All-Red Time (s)	1.9	
Lost Time Adjust (s)	-1.1	
Total Lost Time (s)	4.4	
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	1.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Dont Walk (s)	15.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	21.9	
Actuated g/C Ratio	0.16	
v/c Ratio	0.84	
Control Delay	65.4	
Queue Delay	0.0	
Total Delay	65.4	
LOS	E	
Approach Delay	69.6	
Approach LOS	E	

Intersection Summary



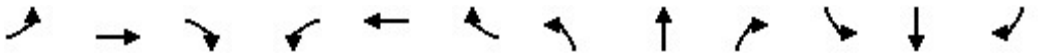
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	27	495	21	16	50	0	0	59	8
Future Volume (vph)	0	0	0	27	495	21	16	50	0	0	59	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	100		130	125		0	0		0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.99							
Frt					0.994						0.983	
Flt Protected					0.997		0.950					
Satd. Flow (prot)	0	0	0	1695	3350	0	1770	1863	0	0	1831	0
Flt Permitted					0.997		0.704					
Satd. Flow (perm)	0	0	0	1695	3341	0	1311	1863	0	0	1831	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					9						10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		383			1482			392			323	
Travel Time (s)		8.7			33.7			8.9			7.3	
Confl. Peds. (#/hr)				30		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	33	597	25	19	60	0	0	71	10
Shared Lane Traffic (%)				100%								
Lane Group Flow (vph)	0	0	0	0	655	0	19	60	0	0	81	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				0	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				0	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0		6.0	6.0			6.0	
Minimum Split (s)				22.8	22.8		20.6	20.6			20.6	
Total Split (s)				40.0	40.0		25.0	25.0			25.0	
Total Split (%)				61.5%	61.5%		38.5%	38.5%			38.5%	
Maximum Green (s)				35.2	35.2		20.4	20.4			20.4	
Yellow Time (s)				3.6	3.6		3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2		1.4	1.4			1.4	
Lost Time Adjust (s)				0.0	-0.8		-0.6	-0.6			-0.6	
Total Lost Time (s)				4.8	4.0		4.0	4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				C-Min	C-Min		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				11.0	11.0		9.0	9.0			9.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					52.5		7.5	7.5			7.5	
Actuated g/C Ratio					0.81		0.12	0.12			0.12	
v/c Ratio					0.24		0.13	0.28			0.37	
Control Delay					2.4		27.1	29.4			28.6	
Queue Delay					0.0		0.0	0.0			0.0	
Total Delay					2.4		27.1	29.4			28.6	
LOS					A		C	C			C	
Approach Delay					2.4			28.8			28.6	
Approach LOS					A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay: 7.6		Intersection LOS: A	
Intersection Capacity Utilization 29.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: 19th St & Commerce St



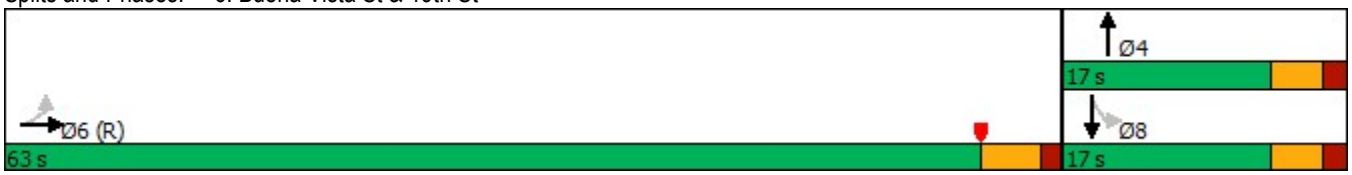


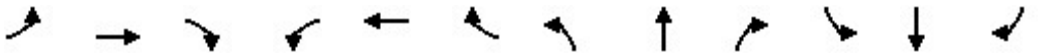
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	540	35	0	0	0	0	38	43	23	39	0
Future Volume (vph)	5	540	35	0	0	0	0	38	43	23	39	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	0		0	0		0	150		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98											
Frt		0.991						0.928				
Flt Protected	0.950										0.982	
Satd. Flow (prot)	1770	1846	0	0	0	0	0	1729	0	0	1829	0
Flt Permitted	0.950										0.863	
Satd. Flow (perm)	1734	1846	0	0	0	0	0	1729	0	0	1608	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11						53				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		532			1485			389			392	
Travel Time (s)		12.1			33.8			8.8			8.9	
Confl. Peds. (#/hr)	30											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	6	669	43	0	0	0	0	47	53	29	48	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	712	0	0	0	0	0	100	0	0	77	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	0	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	0	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	14.9	14.9						10.7		10.7	10.7	
Total Split (s)	63.0	63.0						17.0		17.0	17.0	
Total Split (%)	78.8%	78.8%						21.3%		21.3%	21.3%	
Maximum Green (s)	58.1	58.1						12.3		12.3	12.3	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3						1.5		1.5	1.5	
Lost Time Adjust (s)	-0.8	-0.8						-0.6			-0.6	
Total Lost Time (s)	4.1	4.1						4.1			4.1	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Act Effct Green (s)	58.9	58.9						12.9			12.9	
Actuated g/C Ratio	0.74	0.74						0.16			0.16	
v/c Ratio	0.00	0.52						0.31			0.30	
Control Delay	2.8	6.1						18.8			33.2	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay	2.8	6.1						18.8			33.2	
LOS	A	A						B			C	
Approach Delay		6.1						18.8			33.2	
Approach LOS		A						B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 9.8		Intersection LOS: A	
Intersection Capacity Utilization 52.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: Buena Vista St & 19th St





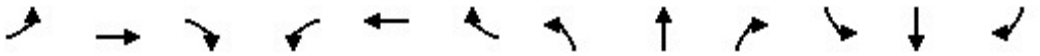
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	27	500	24	21	69	0	0	97	24
Future Volume (vph)	0	0	0	27	500	24	21	69	0	0	97	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	100		130	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.993						0.973	
Flt Protected				0.950				0.989				
Satd. Flow (prot)	0	0	0	1770	3514	0	0	1842	0	0	1812	0
Flt Permitted				0.950				0.811				
Satd. Flow (perm)	0	0	0	1770	3514	0	0	1511	0	0	1812	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					9						18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1482			1455			390			326	
Travel Time (s)		33.7			33.1			8.9			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	33	603	29	25	83	0	0	117	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	33	632	0	0	108	0	0	146	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				0	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				0	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0		6.0	6.0			6.0	
Minimum Split (s)				20.7	20.7		26.7	26.7			26.7	
Total Split (s)				45.0	45.0		35.0	35.0			35.0	
Total Split (%)				56.3%	56.3%		43.8%	43.8%			43.8%	
Maximum Green (s)				40.3	40.3		30.3	30.3			30.3	
Yellow Time (s)				3.6	3.6		3.0	3.0			3.0	
All-Red Time (s)				1.1	1.1		1.7	1.7			1.7	
Lost Time Adjust (s)				0.0	-0.8			-0.6			-0.6	
Total Lost Time (s)				4.7	3.9			4.1			4.1	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				C-Min	C-Min		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				9.0	9.0		15.0	15.0			15.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				61.1	61.9			10.1			10.1	
Actuated g/C Ratio				0.76	0.77			0.13			0.13	
v/c Ratio				0.02	0.23			0.57			0.60	
Control Delay				2.7	6.3			43.7			38.4	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				2.7	6.3			43.7			38.4	
LOS				A	A			D			D	
Approach Delay					6.1			43.7			38.4	
Approach LOS					A			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 26 (33%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 15.7		Intersection LOS: B	
Intersection Capacity Utilization 39.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Hamilton Ave & Commerce St



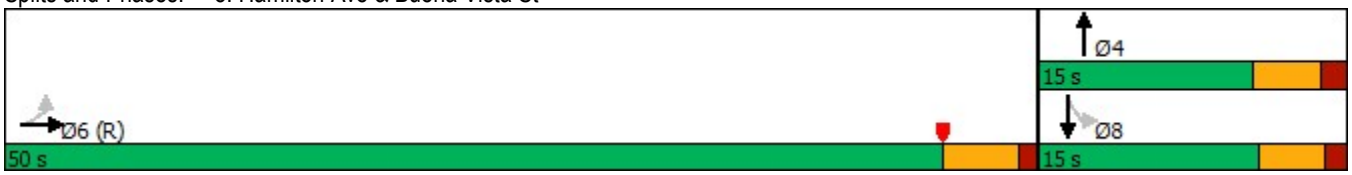


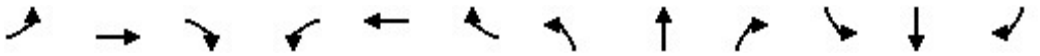
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	613	35	0	0	0	0	32	75	2	11	0
Future Volume (vph)	4	613	35	0	0	0	0	32	75	2	11	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992						0.906				
Flt Protected	0.950										0.994	
Satd. Flow (prot)	1770	1848	0	0	0	0	0	1688	0	0	1852	0
Flt Permitted	0.950										0.946	
Satd. Flow (perm)	1770	1848	0	0	0	0	0	1688	0	0	1762	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10						93				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1485			1450			392			390	
Travel Time (s)		33.8			33.0			8.9			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	5	760	43	0	0	0	0	40	93	2	14	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	803	0	0	0	0	0	133	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						1		1	2	
Detector Template	Left	Thru						Right		Left	Thru	
Leading Detector (ft)	20	100						20		0	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						20		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	14.6	14.6						10.6		10.4	10.4	
Total Split (s)	50.0	50.0						15.0		15.0	15.0	
Total Split (%)	76.9%	76.9%						23.1%		23.1%	23.1%	
Maximum Green (s)	45.4	45.4						10.4		10.6	10.6	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.0	1.0						1.4		1.2	1.2	
Lost Time Adjust (s)	0.0	0.0						-0.6			-0.4	
Total Lost Time (s)	4.6	4.6						4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	C-Min	C-Min						None		None	None	
Act Effct Green (s)	52.0	52.0						7.5			7.4	
Actuated g/C Ratio	0.80	0.80						0.12			0.11	
v/c Ratio	0.00	0.54						0.48			0.08	
Control Delay	2.4	5.1						16.7			25.7	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay	2.4	5.1						16.7			25.7	
LOS	A	A						B			C	
Approach Delay		5.1						16.7			25.7	
Approach LOS		A						B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 7.0		Intersection LOS: A	
Intersection Capacity Utilization 53.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: Hamilton Ave & Buena Vista St



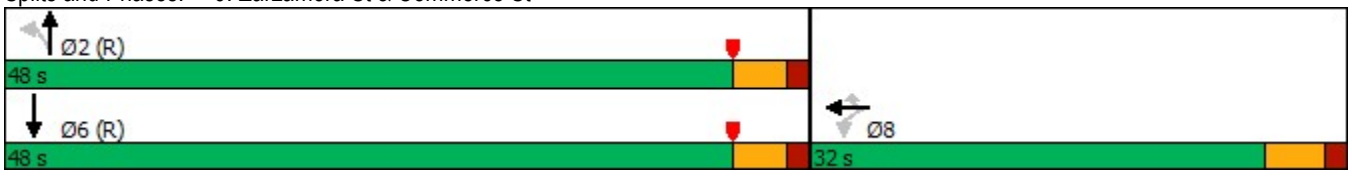


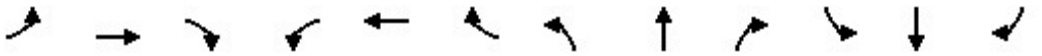
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	122	420	74	74	507	0	0	441	64
Future Volume (vph)	0	0	0	122	420	74	74	507	0	0	441	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor					0.99	0.95						
Frt						0.850					0.981	
Flt Protected					0.989			0.994				
Satd. Flow (prot)	0	0	0	0	3500	1583	0	3518	0	0	3472	0
Flt Permitted					0.989			0.800				
Satd. Flow (perm)	0	0	0	0	3469	1502	0	2831	0	0	3472	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						89					32	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1455			395			389			155	
Travel Time (s)		33.1			9.0			8.8			3.5	
Confl. Peds. (#/hr)				30		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	147	507	89	89	612	0	0	532	77
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	654	89	0	701	0	0	609	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2					
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				6.0	6.0	6.0	10.0	10.0			10.0	
Minimum Split (s)				23.0	23.0	23.0	21.7	21.7			20.7	
Total Split (s)				32.0	32.0	32.0	48.0	48.0			48.0	
Total Split (%)				40.0%	40.0%	40.0%	60.0%	60.0%			60.0%	
Maximum Green (s)				27.0	27.0	27.0	43.3	43.3			43.3	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.4	1.4	1.4	1.5	1.5			1.5	
Lost Time Adjust (s)					-0.8	-0.8		-0.8			-0.8	
Total Lost Time (s)					4.2	4.2		3.9			3.9	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0	2.0	1.0	1.0			1.0	
Recall Mode				None	None	None	C-Min	C-Min			C-Min	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)				11.0	11.0	11.0	10.0	10.0			9.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)					21.3	21.3		50.6			50.6	
Actuated g/C Ratio					0.27	0.27		0.63			0.63	
v/c Ratio					0.71	0.19		0.39			0.28	
Control Delay					19.9	3.0		4.7			7.2	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					19.9	3.0		4.7			7.2	
LOS					B	A		A			A	
Approach Delay					17.9			4.7			7.2	
Approach LOS					B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 75 (94%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 10.2		Intersection LOS: B	
Intersection Capacity Utilization 60.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 9: Zarzamora St & Commerce St



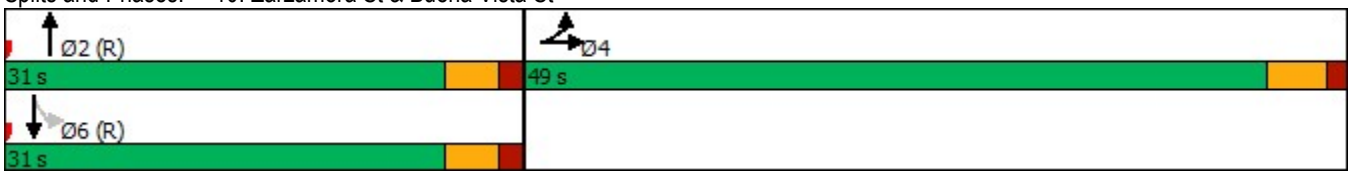


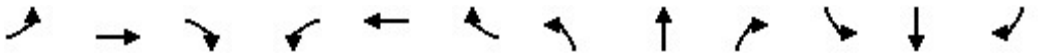
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	533	53	0	0	0	0	407	90	53	365	0
Future Volume (vph)	73	533	53	0	0	0	0	407	90	53	365	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00
Frt		0.986						0.973				
Flt Protected	0.950										0.994	
Satd. Flow (prot)	1770	1837	0	0	0	0	0	3444	0	0	3518	0
Flt Permitted	0.950										0.809	
Satd. Flow (perm)	1770	1837	0	0	0	0	0	3444	0	0	2863	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10						36				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1450			401			394			389	
Travel Time (s)		33.0			9.1			9.0			8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	90	660	66	0	0	0	0	504	112	66	452	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	90	726	0	0	0	0	0	616	0	0	518	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		0	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Split	NA						NA		Perm	NA	
Protected Phases	4	4						2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases										6		
Detector Phase	4	4						2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0						10.0		9.5	9.5	
Minimum Split (s)	10.9	10.9						14.8		14.8	14.8	
Total Split (s)	49.0	49.0						31.0		31.0	31.0	
Total Split (%)	61.3%	61.3%						38.8%		38.8%	38.8%	
Maximum Green (s)	44.1	44.1						26.2		26.2	26.2	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3						1.6		1.6	1.6	
Lost Time Adjust (s)	0.0	0.0						-0.6			-0.6	
Total Lost Time (s)	4.9	4.9						4.2			4.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	None	None						C-Min		C-Min	C-Min	
Act Effct Green (s)	37.3	37.3						33.6			33.6	
Actuated g/C Ratio	0.47	0.47						0.42			0.42	
v/c Ratio	0.11	0.84						0.42			0.43	
Control Delay	10.5	27.8						17.8			15.3	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay	10.5	27.8						17.8			15.3	
LOS	B	C						B			B	
Approach Delay		25.9						17.8			15.3	
Approach LOS		C						B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 21 (26%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 20.5		Intersection LOS: C	
Intersection Capacity Utilization 76.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 10: Zarzamora St & Buena Vista St



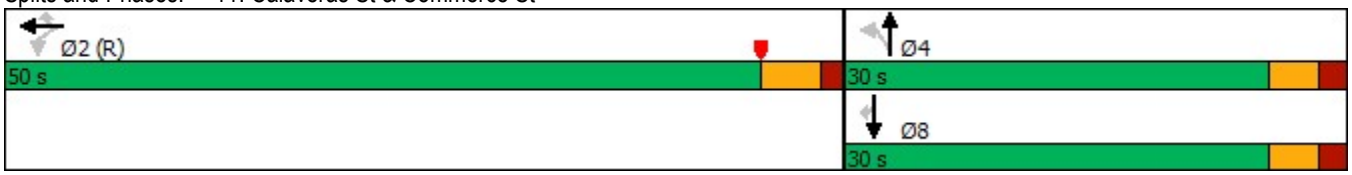


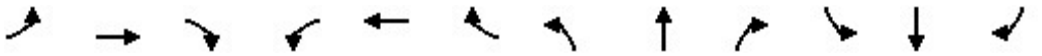
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	11	576	57	8	22	0	0	34	14
Future Volume (vph)	0	0	0	11	576	57	8	22	0	0	34	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected					0.999			0.987				
Satd. Flow (prot)	0	0	0	0	3536	1583	0	1839	0	0	1863	1583
Flt Permitted					0.999			0.894				
Satd. Flow (perm)	0	0	0	0	3536	1583	0	1665	0	0	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						69						27
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		352			709			390			185	
Travel Time (s)		8.0			16.1			8.9			4.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	13	695	69	10	27	0	0	41	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	708	69	0	37	0	0	41	17
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				0	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				0	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	Perm
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2		2	4					8
Detector Phase				2	2	2	4	4			8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	6.0
Minimum Split (s)				22.0	22.0	22.0	21.8	21.8			10.8	10.8
Total Split (s)				50.0	50.0	50.0	30.0	30.0			30.0	30.0
Total Split (%)				62.5%	62.5%	62.5%	37.5%	37.5%			37.5%	37.5%
Maximum Green (s)				45.0	45.0	45.0	25.2	25.2			25.2	25.2
Yellow Time (s)				3.6	3.6	3.6	3.0	3.0			3.0	3.0
All-Red Time (s)				1.4	1.4	1.4	1.8	1.8			1.8	1.8
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	0.0
Total Lost Time (s)					4.2	4.2		4.2			4.2	4.8
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	1.0
Recall Mode				C-Min	C-Min	C-Min	None	None			None	None
Walk Time (s)				7.0	7.0	7.0	7.0	7.0				
Flash Dont Walk (s)				10.0	10.0	10.0	10.0	10.0				
Pedestrian Calls (#/hr)				0	0	0	0	0				
Act Effct Green (s)					70.6	70.6		7.0			7.0	6.4
Actuated g/C Ratio					0.88	0.88		0.09			0.09	0.08
v/c Ratio					0.23	0.05		0.26			0.25	0.11
Control Delay					1.9	0.5		38.5			38.0	11.2
Queue Delay					0.0	0.0		0.0			0.0	0.0
Total Delay					1.9	0.5		38.5			38.0	11.2
LOS					A	A		D			D	B
Approach Delay					1.8			38.5			30.2	
Approach LOS					A			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 44 (55%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay: 5.2		Intersection LOS: A	
Intersection Capacity Utilization 39.0%		ICU Level of Service A	
Analysis Period (min) 15			

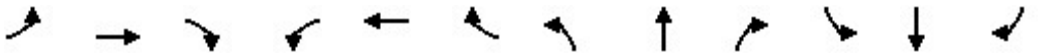
Splits and Phases: 11: Calaveras St & Commerce St





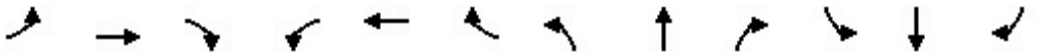
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	684	0	0	0	0	0	6	6	25	6	0
Future Volume (vph)	15	684	0	0	0	0	0	6	6	25	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt								0.932				
Flt Protected	0.950										0.961	
Satd. Flow (prot)	1770	1863	0	0	0	0	0	1736	0	0	1790	0
Flt Permitted	0.950										0.961	
Satd. Flow (perm)	1770	1863	0	0	0	0	0	1736	0	0	1790	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		359			696			281			390	
Travel Time (s)		8.2			15.8			6.4			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	19	848	0	0	0	0	0	7	7	31	7	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	848	0	0	0	0	0	14	0	0	38	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.3%		ICU Level of Service B	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	3	635	0	15	4	0	0	7	4
Future Volume (vph)	0	0	0	3	635	0	15	4	0	0	7	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.948	
Flt Protected								0.962				
Satd. Flow (prot)	0	0	0	0	3539	0	0	1792	0	0	1766	0
Flt Permitted								0.962				
Satd. Flow (perm)	0	0	0	0	3539	0	0	1792	0	0	1766	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		709			1446			391			236	
Travel Time (s)		16.1			32.9			8.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	4	766	0	18	5	0	0	8	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	770	0	0	23	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.1%		ICU Level of Service A	
Analysis Period (min) 15			

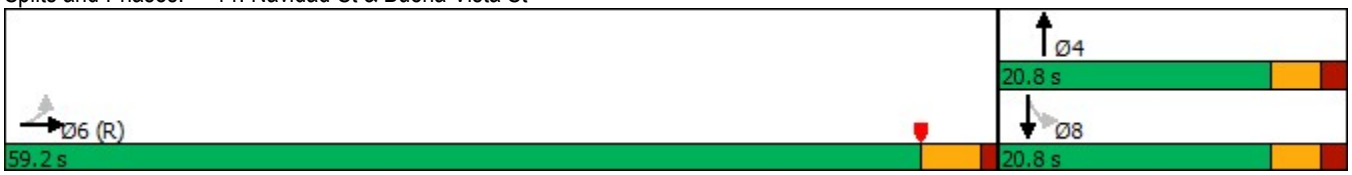


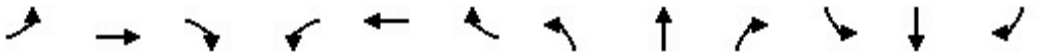
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	766	8	0	0	0	0	1	6	6	4	0
Future Volume (vph)	4	766	8	0	0	0	0	1	6	6	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998						0.882				
Flt Protected	0.950										0.972	
Satd. Flow (prot)	1770	1859	0	0	0	0	0	1643	0	0	1811	0
Flt Permitted	0.950										0.906	
Satd. Flow (perm)	1770	1859	0	0	0	0	0	1643	0	0	1688	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						7				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		696			1448			392			391	
Travel Time (s)		15.8			32.9			8.9			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	5	949	10	0	0	0	0	1	7	7	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	959	0	0	0	0	0	8	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	0	100						100		0	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	0	6						6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	18.7	18.7						20.7		20.7	20.7	
Total Split (s)	59.2	59.2						20.8		20.8	20.8	
Total Split (%)	74.0%	74.0%						26.0%		26.0%	26.0%	
Maximum Green (s)	54.5	54.5						16.1		16.1	16.1	
Yellow Time (s)	3.6	3.6						3.0		3.0	3.0	
All-Red Time (s)	1.1	1.1						1.7		1.7	1.7	
Lost Time Adjust (s)	-0.6	-0.6						-0.5			-0.5	
Total Lost Time (s)	4.1	4.1						4.2			4.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Dont Walk (s)	7.0	7.0						9.0		9.0	9.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)	55.1	55.1						16.6			16.6	
Actuated g/C Ratio	0.69	0.69						0.21			0.21	
v/c Ratio	0.00	0.75						0.02			0.03	
Control Delay	4.0	12.7						16.3			33.7	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay	4.0	12.7						16.3			33.7	
LOS	A	B						B			C	
Approach Delay		12.7						16.3			33.7	
Approach LOS		B						B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 71 (89%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 12.9		Intersection LOS: B	
Intersection Capacity Utilization 59.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 14: Navidad St & Buena Vista St



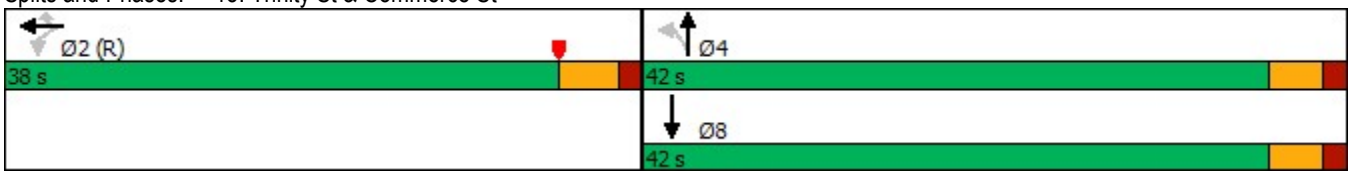


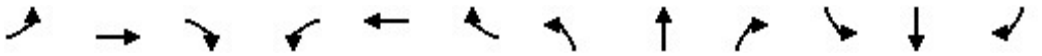
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	46	576	26	38	187	0	0	143	37
Future Volume (vph)	0	0	0	46	576	26	38	187	0	0	143	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.972	
Flt Protected					0.996			0.992				
Satd. Flow (prot)	0	0	0	0	3525	1583	0	1848	0	0	1811	0
Flt Permitted					0.996			0.923				
Satd. Flow (perm)	0	0	0	0	3525	1583	0	1719	0	0	1811	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						31					22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1446			1095			394			321	
Travel Time (s)		32.9			24.9			9.0			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	56	695	31	46	226	0	0	173	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	751	31	0	272	0	0	218	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				23.0	23.0	23.0	22.8	22.8			36.8	
Total Split (s)				38.0	38.0	38.0	42.0	42.0			42.0	
Total Split (%)				47.5%	47.5%	47.5%	52.5%	52.5%			52.5%	
Maximum Green (s)				33.0	33.0	33.0	37.2	37.2			37.2	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.4	1.4	1.4	1.6	1.6			1.6	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					4.2	4.2		4.2			4.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0				
Flash Dont Walk (s)				11.0	11.0	11.0	11.0	11.0				
Pedestrian Calls (#/hr)				0	0	0	0	0				
Act Effct Green (s)					33.8	33.8		37.8			37.8	
Actuated g/C Ratio					0.42	0.42		0.47			0.47	
v/c Ratio					0.50	0.05		0.33			0.25	
Control Delay					11.1	1.9		11.7			12.2	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					11.1	1.9		11.7			12.2	
LOS					B	A		B			B	
Approach Delay					10.7			11.7			12.2	
Approach LOS					B			B			B	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 6 (8%), Referenced to phase 2:WBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.50	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 53.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 15: Trinity St & Commerce St



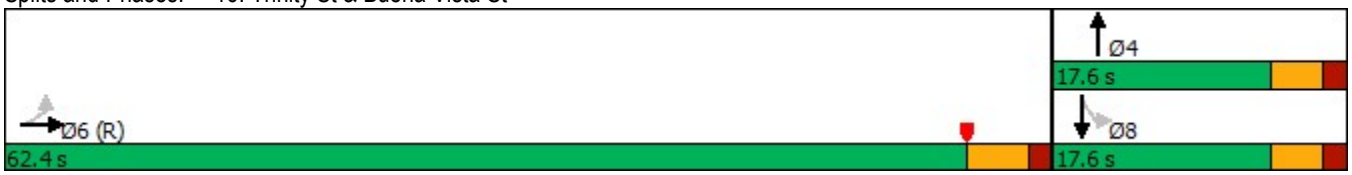


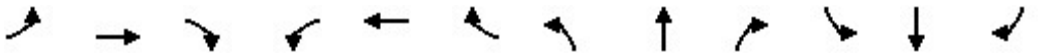
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	722	57	0	0	0	0	66	66	7	34	0
Future Volume (vph)	7	722	57	0	0	0	0	66	66	7	34	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		130	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00										
Frt		0.989						0.932				
Flt Protected	0.950										0.991	
Satd. Flow (prot)	1770	1837	0	0	0	0	0	1736	0	0	1846	0
Flt Permitted	0.950										0.881	
Satd. Flow (perm)	1770	1837	0	0	0	0	0	1736	0	0	1641	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13						54				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1448			1114			389			394	
Travel Time (s)		32.9			25.3			8.8			9.0	
Confl. Peds. (#/hr)			30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	9	895	71	0	0	0	0	82	82	9	42	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	966	0	0	0	0	0	164	0	0	51	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	0	100						100		0	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	0	6						6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	15.3	15.3						10.8		10.8	10.8	
Total Split (s)	62.4	62.4						17.6		17.6	17.6	
Total Split (%)	78.0%	78.0%						22.0%		22.0%	22.0%	
Maximum Green (s)	57.3	57.3						12.9		12.9	12.9	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.5	1.5						1.5		1.5	1.5	
Lost Time Adjust (s)	-0.9	-0.9						-0.6			-0.6	
Total Lost Time (s)	4.2	4.2						4.1			4.1	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	C-Max	C-Max						None		None	None	
Act Effct Green (s)	62.1	62.1						9.6			9.6	
Actuated g/C Ratio	0.78	0.78						0.12			0.12	
v/c Ratio	0.01	0.68						0.65			0.26	
Control Delay	0.1	1.9						33.8			26.8	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay	0.1	1.9						33.8			26.8	
LOS	A	A						C			C	
Approach Delay		1.9						33.8			26.8	
Approach LOS		A						C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 24 (30%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 7.3		Intersection LOS: A	
Intersection Capacity Utilization 63.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 16: Trinity St & Buena Vista St



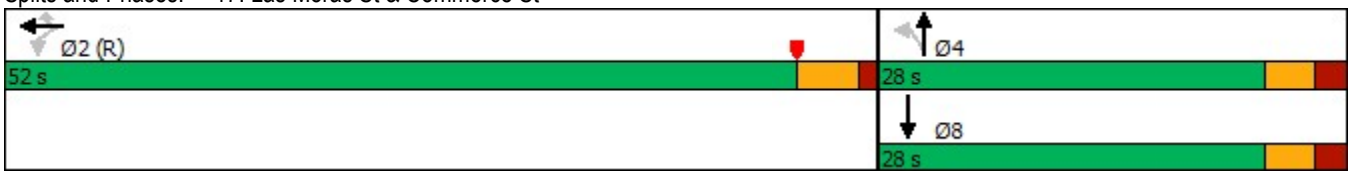


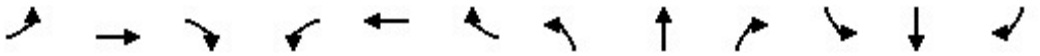
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	5	593	13	7	9	0	0	10	4
Future Volume (vph)	0	0	0	5	593	13	7	9	0	0	10	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	130		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.960	
Flt Protected								0.979				
Satd. Flow (prot)	0	0	0	0	3539	1583	0	1824	0	0	1788	0
Flt Permitted								0.934				
Satd. Flow (perm)	0	0	0	0	3539	1583	0	1740	0	0	1788	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						27					5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1095			1083			394			323	
Travel Time (s)		24.9			24.6			9.0			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	6	715	16	8	11	0	0	12	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	721	16	0	19	0	0	17	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				14.8	14.8	14.8	11.0	11.0			11.0	
Total Split (s)				52.0	52.0	52.0	28.0	28.0			28.0	
Total Split (%)				65.0%	65.0%	65.0%	35.0%	35.0%			35.0%	
Maximum Green (s)				47.2	47.2	47.2	23.0	23.0			23.0	
Yellow Time (s)				3.6	3.6	3.6	3.0	3.0			3.0	
All-Red Time (s)				1.2	1.2	1.2	2.0	2.0			2.0	
Lost Time Adjust (s)					-0.6	-0.6		-0.6			-0.6	
Total Lost Time (s)					4.2	4.2		4.4			4.4	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Act Effct Green (s)					47.8	47.8		23.6			23.6	
Actuated g/C Ratio					0.60	0.60		0.30			0.30	
v/c Ratio					0.34	0.02		0.04			0.03	
Control Delay					8.7	1.8		24.1			17.1	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					8.7	1.8		24.1			17.1	
LOS					A	A		C			B	
Approach Delay					8.5			24.1			17.1	
Approach LOS					A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 67 (84%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 9.1		Intersection LOS: A	
Intersection Capacity Utilization 33.0%		ICU Level of Service A	
Analysis Period (min) 15			

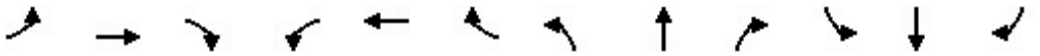
Splits and Phases: 17: Las Moras St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	780	5	0	0	0	0	5	6	19	3	0
Future Volume (vph)	7	780	5	0	0	0	0	5	6	19	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.927				
Flt Protected	0.950										0.959	
Satd. Flow (prot)	1770	1861	0	0	0	0	0	1727	0	0	1786	0
Flt Permitted	0.950										0.959	
Satd. Flow (perm)	1770	1861	0	0	0	0	0	1727	0	0	1786	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1114			594			281			394	
Travel Time (s)		25.3			13.5			6.4			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	9	967	6	0	0	0	0	6	7	24	4	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	973	0	0	0	0	0	13	0	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

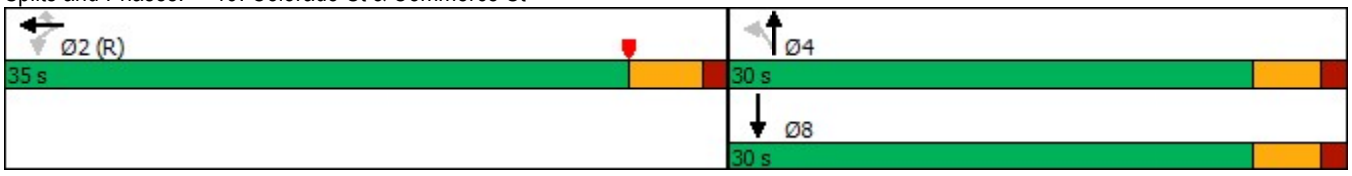


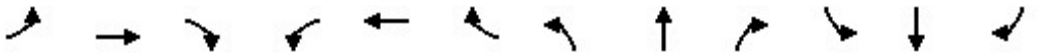
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	93	514	50	37	401	0	0	313	100
Future Volume (vph)	0	0	0	93	514	50	37	401	0	0	313	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor					0.99	0.95						
Frt						0.850					0.964	
Flt Protected					0.992			0.996				
Satd. Flow (prot)	0	0	0	0	3511	1583	0	3525	0	0	3412	0
Flt Permitted					0.992			0.882				
Satd. Flow (perm)	0	0	0	0	3474	1511	0	3122	0	0	3412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						60					79	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			377			390			320	
Travel Time (s)		24.6			8.6			8.9			7.3	
Confl. Peds. (#/hr)				60		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	112	620	60	45	484	0	0	378	121
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	732	60	0	529	0	0	499	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				25.0	25.0	25.0	20.6	20.6			20.6	
Total Split (s)				35.0	35.0	35.0	30.0	30.0			30.0	
Total Split (%)				53.8%	53.8%	53.8%	46.2%	46.2%			46.2%	
Maximum Green (s)				30.2	30.2	30.2	25.4	25.4			25.4	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)				10.0	10.0	10.0	9.0	9.0			9.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)					31.0	31.0		26.0			26.0	
Actuated g/C Ratio					0.48	0.48		0.40			0.40	
v/c Ratio					0.44	0.08		0.42			0.35	
Control Delay					12.3	3.3		12.8			12.2	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					12.3	3.3		12.8			12.2	
LOS					B	A		B			B	
Approach Delay					11.6			12.8			12.2	
Approach LOS					B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 54 (83%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay: 12.1		Intersection LOS: B	
Intersection Capacity Utilization 55.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 19: Colorado St & Commerce St



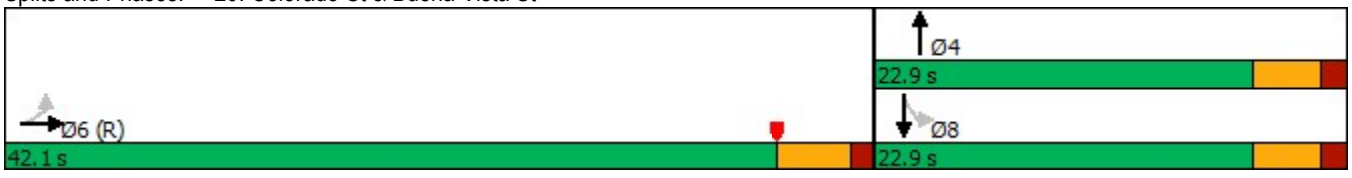


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	643	10	0	0	0	0	192	52	42	152	0
Future Volume (vph)	160	643	10	0	0	0	0	192	52	42	152	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		130	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00
Ped Bike Factor	0.94	1.00										
Frt		0.998						0.968				
Flt Protected	0.950										0.989	
Satd. Flow (prot)	1770	1858	0	0	0	0	0	3426	0	0	3500	0
Flt Permitted	0.950										0.835	
Satd. Flow (perm)	1655	1858	0	0	0	0	0	3426	0	0	2955	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						53				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		472			488			360			390	
Travel Time (s)		10.7			11.1			8.2			8.9	
Confl. Peds. (#/hr)	60		30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	198	797	12	0	0	0	0	238	64	52	188	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	198	809	0	0	0	0	0	302	0	0	240	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	0	100						100		0	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	0	6						6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	25.0	25.0						20.6		22.6	22.6	
Total Split (s)	42.1	42.1						22.9		22.9	22.9	
Total Split (%)	64.8%	64.8%						35.2%		35.2%	35.2%	
Maximum Green (s)	37.3	37.3						18.3		18.3	18.3	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2						1.4		1.4	1.4	
Lost Time Adjust (s)	-0.8	-0.8						-0.6			-0.6	
Total Lost Time (s)	4.0	4.0						4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0						9.0		9.0	9.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)	38.1	38.1						18.9			18.9	
Actuated g/C Ratio	0.59	0.59						0.29			0.29	
v/c Ratio	0.20	0.74						0.29			0.28	
Control Delay	7.0	15.2						15.5			12.4	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay	7.0	15.2						15.5			12.4	
LOS	A	B						B			B	
Approach Delay		13.6						15.5			12.4	
Approach LOS		B						B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 64 (98%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 13.8		Intersection LOS: B	
Intersection Capacity Utilization 63.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 20: Colorado St & Buena Vista St

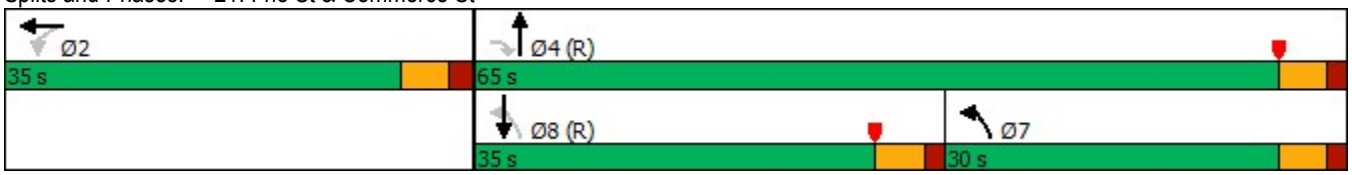


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	23	20	476	32	252	728	0	0	158	150
Future Volume (vph)	0	0	23	20	476	32	252	728	0	0	158	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	105		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.865		0.991						0.927	
Flt Protected					0.998		0.950					
Satd. Flow (prot)	0	0	1611	0	5029	0	1770	3539	0	0	3281	0
Flt Permitted					0.998		0.487					
Satd. Flow (perm)	0	0	1611	0	5029	0	907	3539	0	0	3281	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			988		10						181	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1809			501			387			300	
Travel Time (s)		41.1			11.4			8.8			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	28	24	574	39	304	878	0	0	191	181
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	28	0	637	0	304	878	0	0	372	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors			1	1	2		1	2			2	
Detector Template			Right	Left	Thru		Left	Thru			Thru	
Leading Detector (ft)			20	20	100		20	100			100	
Trailing Detector (ft)			0	0	0		0	0			0	
Detector 1 Position(ft)			0	0	0		0	0			0	
Detector 1 Size(ft)			20	20	6		20	6			6	
Detector 1 Type			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)			0.0	0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)			0.0	0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)			0.0	0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type			Perm	Perm	NA		D.P+P	NA			NA	
Protected Phases					2		7	4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	2			8					
Detector Phase			4	2	2		7	4			8	
Switch Phase												
Minimum Initial (s)			10.0	10.0	10.0		3.0	10.0			10.0	
Minimum Split (s)			15.2	15.5	15.5		8.2	15.2			15.2	
Total Split (s)			65.0	35.0	35.0		30.0	65.0			35.0	
Total Split (%)			65.0%	35.0%	35.0%		30.0%	65.0%			35.0%	
Maximum Green (s)			59.8	29.5	29.5		24.8	59.8			29.8	
Yellow Time (s)			3.6	3.6	3.6		3.6	3.6			3.6	
All-Red Time (s)			1.6	1.9	1.9		1.6	1.6			1.6	
Lost Time Adjust (s)			0.0		-1.3		-1.0	-2.1			-2.1	
Total Lost Time (s)			5.2		4.2		4.2	3.1			3.1	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)			1.0	1.0	1.0		1.0	1.0			1.0	
Recall Mode			C-Max	Min	Min		None	C-Max			C-Max	
Act Effct Green (s)			73.0		17.6		69.8	75.1			45.1	
Actuated g/C Ratio			0.73		0.18		0.70	0.75			0.45	
v/c Ratio			0.02		0.71		0.36	0.33			0.24	
Control Delay			0.0		41.6		8.3	4.5			9.3	
Queue Delay			0.0		0.0		0.0	0.5			0.0	
Total Delay			0.0		41.6		8.4	5.0			9.3	
LOS			A		D		A	A			A	
Approach Delay					41.6			5.9			9.3	
Approach LOS					D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 15 (15%), Referenced to phase 4:NBT and 8:NBSB, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 16.6		Intersection LOS: B	
Intersection Capacity Utilization 47.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 21: Frio St & Commerce St



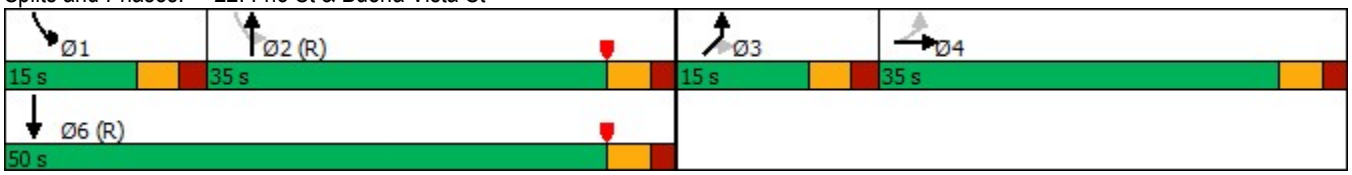


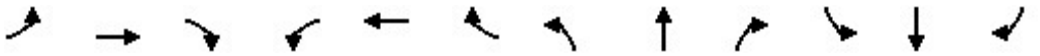
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	SBR2	NEL	NER	NER2
Lane Configurations											
Traffic Volume (vph)	115	387	93	709	48	28	187	53	14	6	5
Future Volume (vph)	115	387	93	709	48	28	187	53	14	6	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150		0	100			0	0	
Storage Lanes	0		0		0	1			1	1	
Taper Length (ft)	25					25			25		
Lane Util. Factor	0.91	0.91	0.91	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.977		0.990			0.967		0.954	0.850	
Flt Protected		0.990				0.950			0.967		
Satd. Flow (prot)	0	4919	0	3504	0	1770	3422	0	1718	1504	0
Flt Permitted		0.990				0.204			0.967		
Satd. Flow (perm)	0	4919	0	3504	0	380	3422	0	1718	1504	0
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)				7			81			604	
Link Speed (mph)		30		30			30		30		
Link Distance (ft)		1687		398			387		431		
Travel Time (s)		38.3		9.0			8.8		9.8		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	150	505	121	925	63	37	244	69	18	8	7
Shared Lane Traffic (%)										100%	
Lane Group Flow (vph)	0	776	0	988	0	37	313	0	26	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Right	Right
Median Width(ft)		0		12			12		12		
Link Offset(ft)		0		0			0		0		
Crosswalk Width(ft)		16		16			16		16		
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9		9	15		9	15	9	9
Number of Detectors	1	2		2		1	2		1	1	
Detector Template	Left	Thru		Thru		Left	Thru		Left		
Leading Detector (ft)	20	100		100		20	100		20	0	
Trailing Detector (ft)	0	0		0		0	0		0	0	
Detector 1 Position(ft)	0	0		0		0	0		0	0	
Detector 1 Size(ft)	20	6		6		20	6		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel											
Detector 1 Extend (s)	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94		94			94				
Detector 2 Size(ft)		6		6			6				
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)		0.0		0.0			0.0				
Turn Type	Perm	NA		NA		D.P+P	NA		Prot	Perm	
Protected Phases		4		2		1	6		3		

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	SBR2	NEL	NER	NER2
Permitted Phases	4					2				3	
Detector Phase	4	4		2		1	6		3	3	
Switch Phase											
Minimum Initial (s)	14.7	14.7		10.0		3.0	10.0		3.0	3.0	
Minimum Split (s)	28.2	28.2		27.2		8.2	28.2		8.4	8.4	
Total Split (s)	35.0	35.0		35.0		15.0	50.0		15.0	15.0	
Total Split (%)	35.0%	35.0%		35.0%		15.0%	50.0%		15.0%	15.0%	
Maximum Green (s)	29.8	29.8		29.8		9.8	44.8		9.8	9.8	
Yellow Time (s)	3.2	3.2		3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	2.0	2.0		2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-1.3		-2.1		-1.0	-2.1		-1.0	0.0	
Total Lost Time (s)		3.9		3.1		4.2	3.1		4.2	5.2	
Lead/Lag	Lag	Lag		Lag		Lead			Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes		Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0		1.0	2.0		0.2	0.2	
Recall Mode	None	None		C-Min		None	C-Min		None	None	
Walk Time (s)	7.0	7.0		7.0			7.0				
Flash Dont Walk (s)	16.0	16.0		15.0			16.0				
Pedestrian Calls (#/hr)	0	0		0			0				
Act Effct Green (s)		22.6		58.0		60.5	64.1		5.4	4.4	
Actuated g/C Ratio		0.23		0.58		0.60	0.64		0.05	0.04	
v/c Ratio		0.70		0.49		0.12	0.14		0.28	0.01	
Control Delay		38.8		16.2		9.4	5.4		52.5	0.0	
Queue Delay		0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		38.8		16.2		9.4	5.4		52.5	0.0	
LOS		D		B		A	A		D	A	
Approach Delay		38.8		16.2			5.8		41.4		
Approach LOS		D		B			A		D		

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 23.0		Intersection LOS: C	
Intersection Capacity Utilization 56.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 22: Frio St & Buena Vista St



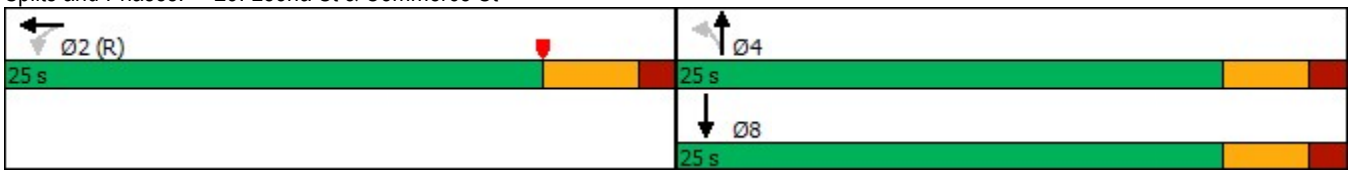


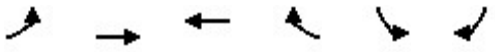
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	593	14	7	20	0	0	1	8
Future Volume (vph)	0	0	0	8	593	14	7	20	0	0	1	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	142		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00							
Frt					0.997						0.877	
Flt Protected					0.999			0.988				
Satd. Flow (prot)	0	0	0	0	5065	0	0	1840	0	0	1634	0
Flt Permitted					0.999			0.922				
Satd. Flow (perm)	0	0	0	0	5047	0	0	1717	0	0	1634	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					8						10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		501			391			383			320	
Travel Time (s)		11.4			8.9			8.7			7.3	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	10	715	17	8	24	0	0	1	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	742	0	0	32	0	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0		6.0	6.0			6.0	
Minimum Split (s)				24.0	24.0		23.7	23.7			10.7	
Total Split (s)				25.0	25.0		25.0	25.0			25.0	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				20.0	20.0		20.3	20.3			20.3	
Yellow Time (s)				3.6	3.6		3.2	3.2			3.2	
All-Red Time (s)				1.4	1.4		1.5	1.5			1.5	
Lost Time Adjust (s)					-1.0			-0.7			-0.7	
Total Lost Time (s)					4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				C-Min	C-Min		Min	Min			Min	
Walk Time (s)				7.0	7.0		7.0	7.0				
Flash Dont Walk (s)				12.0	12.0		12.0	12.0				
Pedestrian Calls (#/hr)				0	0		0	0				
Act Effct Green (s)					35.3			6.7			6.7	
Actuated g/C Ratio					0.71			0.13			0.13	
v/c Ratio					0.21			0.14			0.05	
Control Delay					2.2			19.9			12.7	
Queue Delay					0.0			0.0			0.0	
Total Delay					2.2			19.9			12.7	
LOS					A			B			B	
Approach Delay					2.2			19.9			12.7	
Approach LOS					A			B			B	

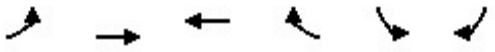
Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 45 (90%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.21			
Intersection Signal Delay: 3.1		Intersection LOS: A	
Intersection Capacity Utilization 27.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 23: Leona St & Commerce St





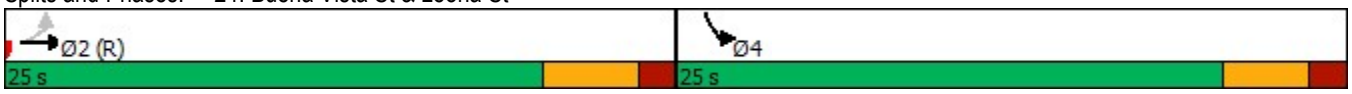
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	876	0	0	4	0
Future Volume (vph)	7	876	0	0	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						
Link Speed (mph)		30	30		30	
Link Distance (ft)		485	425		383	
Travel Time (s)		11.0	9.7		8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	9	1143	0	0	5	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1152	0	0	5	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2			1	
Detector Template	Left	Thru			Left	
Leading Detector (ft)	20	100			20	
Trailing Detector (ft)	0	0			0	
Detector 1 Position(ft)	0	0			0	
Detector 1 Size(ft)	20	6			20	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	
Detector 2 Position(ft)		94				
Detector 2 Size(ft)		6				
Detector 2 Type		Cl+Ex				
Detector 2 Channel						
Detector 2 Extend (s)		0.0				
Turn Type	Perm	NA			Prot	
Protected Phases		2			4	
Permitted Phases	2					
Detector Phase	2	2			4	
Switch Phase						

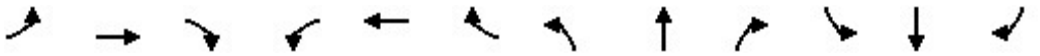


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)	10.0	10.0			6.0	
Minimum Split (s)	25.0	25.0			24.7	
Total Split (s)	25.0	25.0			25.0	
Total Split (%)	50.0%	50.0%			50.0%	
Maximum Green (s)	20.0	20.0			20.3	
Yellow Time (s)	3.6	3.6			3.2	
All-Red Time (s)	1.4	1.4			1.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		5.0			4.7	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.0			1.0	
Recall Mode	C-Min	C-Min			None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			13.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effct Green (s)		46.9			6.0	
Actuated g/C Ratio		0.94			0.12	
v/c Ratio		0.24			0.02	
Control Delay		1.3			19.8	
Queue Delay		0.0			0.0	
Total Delay		1.3			19.8	
LOS		A			B	
Approach Delay		1.3			19.8	
Approach LOS		A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 20 (40%), Referenced to phase 2:EBTL and 6:, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.24			
Intersection Signal Delay: 1.4		Intersection LOS: A	
Intersection Capacity Utilization 33.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Buena Vista St & Leona St



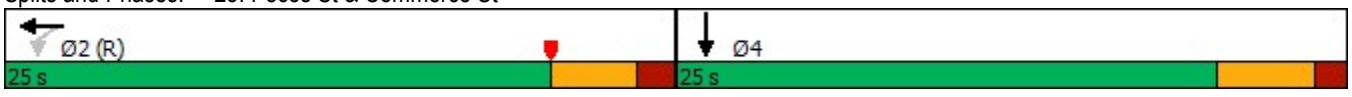


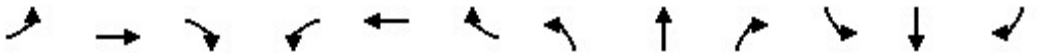
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	93	306	0	0	0	0	0	720	251
Future Volume (vph)	0	0	0	93	306	0	0	0	0	0	720	251
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Frt											0.961	
Flt Protected					0.988							
Satd. Flow (prot)	0	0	0	0	5024	0	0	0	0	0	4887	0
Flt Permitted					0.988							
Satd. Flow (perm)	0	0	0	0	5024	0	0	0	0	0	4887	0
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)											219	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		391			387			408			325	
Travel Time (s)		8.9			8.8			9.3			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	112	369	0	0	0	0	0	869	303
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	481	0	0	0	0	0	1172	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	
Detector Template				Left	Thru						Thru	
Leading Detector (ft)				20	100						100	
Trailing Detector (ft)				0	0						0	
Detector 1 Position(ft)				0	0						0	
Detector 1 Size(ft)				20	6						6	
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	
Detector 1 Queue (s)				0.0	0.0						0.0	
Detector 1 Delay (s)				0.0	0.0						0.0	
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	
Protected Phases					2						4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2								
Detector Phase				2	2						4	
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	
Minimum Split (s)				24.7	24.7						23.9	
Total Split (s)				25.0	25.0						25.0	
Total Split (%)				50.0%	50.0%						50.0%	
Maximum Green (s)				20.3	20.3						20.1	
Yellow Time (s)				3.2	3.2						3.6	
All-Red Time (s)				1.5	1.5						1.3	
Lost Time Adjust (s)					-0.7						-1.1	
Total Lost Time (s)					4.0						3.8	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0						1.0	
Recall Mode				C-Min	C-Min						Min	
Walk Time (s)				7.0	7.0						7.0	
Flash Dont Walk (s)				13.0	13.0						12.0	
Pedestrian Calls (#/hr)				0	0						0	
Act Effct Green (s)					25.8						16.4	
Actuated g/C Ratio					0.52						0.33	
v/c Ratio					0.19						0.67	
Control Delay					7.5						13.1	
Queue Delay					0.0						0.0	
Total Delay					7.5						13.1	
LOS					A						B	
Approach Delay					7.5						13.1	
Approach LOS					A						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 40 (80%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 11.5		Intersection LOS: B	
Intersection Capacity Utilization 37.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 25: Pecos St & Commerce St





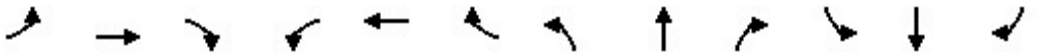
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	634	246	0	0	0	0	0	0	210	468	0
Future Volume (vph)	0	634	246	0	0	0	0	0	0	210	468	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	1.00
Frt		0.958										
Flt Protected											0.985	
Satd. Flow (prot)	0	4872	0	0	0	0	0	0	0	0	6312	0
Flt Permitted											0.985	
Satd. Flow (perm)	0	4872	0	0	0	0	0	0	0	0	6312	0
Right Turn on Red			Yes			Yes			Yes	No		Yes
Satd. Flow (RTOR)		162										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		425			388			389			408	
Travel Time (s)		9.7			8.8			8.8			9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	0	827	321	0	0	0	0	0	0	274	610	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1148	0	0	0	0	0	0	0	0	884	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2								1	2	
Detector Template		Thru								Left	Thru	
Leading Detector (ft)		100								0	100	
Trailing Detector (ft)		0								0	0	
Detector 1 Position(ft)		0								0	0	
Detector 1 Size(ft)		6								0	6	
Detector 1 Type		Cl+Ex								Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0								0.0	0.0	
Detector 1 Queue (s)		0.0								0.0	0.0	
Detector 1 Delay (s)		0.0								0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA								Perm	NA	
Protected Phases		4									2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases										2		
Detector Phase		4								2	2	
Switch Phase												
Minimum Initial (s)		6.0								20.0	20.0	
Minimum Split (s)		24.7								25.0	25.0	
Total Split (s)		25.0								25.0	25.0	
Total Split (%)		50.0%								50.0%	50.0%	
Maximum Green (s)		20.3								20.0	20.0	
Yellow Time (s)		3.2								3.6	3.6	
All-Red Time (s)		1.5								1.4	1.4	
Lost Time Adjust (s)		-0.7									-1.0	
Total Lost Time (s)		4.0									4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0								4.0	4.0	
Recall Mode		C-Max								Min	Min	
Walk Time (s)		7.0								7.0	7.0	
Flash Dont Walk (s)		13.0								13.0	13.0	
Pedestrian Calls (#/hr)		0								0	0	
Act Effct Green (s)		21.0									21.0	
Actuated g/C Ratio		0.42									0.42	
v/c Ratio		0.54									0.33	
Control Delay		10.6									18.3	
Queue Delay		0.0									0.0	
Total Delay		10.6									18.3	
LOS		B									B	
Approach Delay		10.6									18.3	
Approach LOS		B									B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 20 (40%), Referenced to phase 4:EBT, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 14.0		Intersection LOS: B	
Intersection Capacity Utilization 44.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 26: Buena Vista St & Pecos St





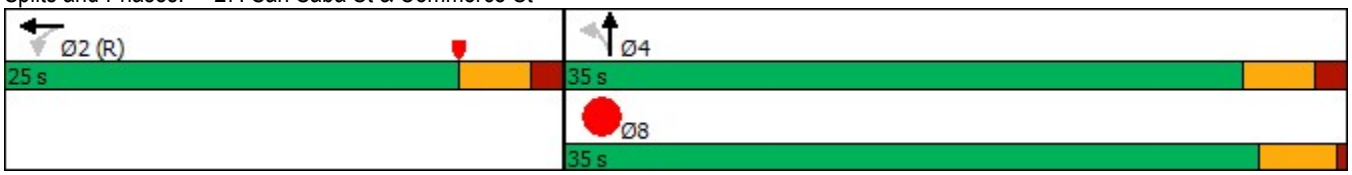
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	388	209	11	89	0	0	0	0
Future Volume (vph)	0	0	0	0	388	209	11	89	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.947							
Flt Protected								0.995				
Satd. Flow (prot)	0	0	0	0	4816	0	0	1853	0	0	0	0
Flt Permitted								0.995				
Satd. Flow (perm)	0	0	0	0	4816	0	0	1853	0	0	0	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		387			563			409			325	
Travel Time (s)		8.8			12.8			9.3			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	0	468	252	13	107	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	720	0	0	120	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2				
Detector Template					Thru		Left	Thru				
Leading Detector (ft)				0	100		0	100				
Trailing Detector (ft)				0	0		0	0				
Detector 1 Position(ft)				0	0		0	0				
Detector 1 Size(ft)				0	6		0	6				
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0				
Detector 1 Queue (s)				0.0	0.0		0.0	0.0				
Detector 1 Delay (s)				0.0	0.0		0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA		Perm	NA				
Protected Phases					2			4				

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Growth Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2			4					
Detector Phase				2	2		4	4				
Switch Phase												
Minimum Initial (s)				10.0	10.0		5.0	5.0				
Minimum Split (s)				14.7	14.7		9.7	9.7				
Total Split (s)				25.0	25.0		35.0	35.0				
Total Split (%)				41.7%	41.7%		58.3%	58.3%				
Maximum Green (s)				20.3	20.3		30.3	30.3				
Yellow Time (s)				3.2	3.2		3.2	3.2				
All-Red Time (s)				1.5	1.5		1.5	1.5				
Lost Time Adjust (s)					-2.0			-1.7				
Total Lost Time (s)					2.7			3.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0				
Recall Mode				C-Max	C-Max		Max	Max				
Walk Time (s)				7.0	7.0		7.0	7.0				
Flash Dont Walk (s)				12.0	12.0		12.0	12.0				
Pedestrian Calls (#/hr)				0	0		0	0				
Act Effct Green (s)					22.3			32.0				
Actuated g/C Ratio					0.37			0.53				
v/c Ratio					0.40			0.12				
Control Delay					14.8			7.4				
Queue Delay					0.0			0.0				
Total Delay					14.8			7.4				
LOS					B			A				
Approach Delay					14.8			7.4				
Approach LOS					B			A				

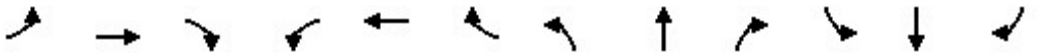
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 13.7		Intersection LOS: B	
Intersection Capacity Utilization 26.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 27: San Saba St & Commerce St



Lane Group	Ø8
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	9.7
Total Split (s)	35.0
Total Split (%)	58%
Maximum Green (s)	31.0
Yellow Time (s)	3.5
All-Red Time (s)	0.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	124	699	4	0	0	0	0	4	3	0	0	0
Future Volume (vph)	124	699	4	0	0	0	0	4	3	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	104		101	0		0	0		0	0		0
Storage Lanes	1		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.44									
Frt			0.850					0.940				
Flt Protected	0.950											
Satd. Flow (prot)	1770	5085	1583	0	0	0	0	1751	0	0	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	1770	5085	692	0	0	0	0	1751	0	0	0	0
Right Turn on Red	No		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			25					4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		388			565			393			409	
Travel Time (s)		8.8			12.8			8.9			9.3	
Confl. Peds. (#/hr)			200									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	162	912	5	0	0	0	0	5	4	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	162	912	5	0	0	0	0	9	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2				
Detector Template	Left	Thru	Right					Thru				
Leading Detector (ft)	20	100	20					100				
Trailing Detector (ft)	0	0	0					0				
Detector 1 Position(ft)	0	0	0					0				
Detector 1 Size(ft)	20	6	20					6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0				
Detector 1 Queue (s)	0.0	0.0	0.0					0.0				
Detector 1 Delay (s)	0.0	0.0	0.0					0.0				
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0				

Lane Group	Ø8
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Growth Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Split	NA	Perm					NA				
Protected Phases	2	2						4				
Permitted Phases			2									
Detector Phase	2	2	2					4				
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					4.9				
Minimum Split (s)	15.0	15.0	15.0					10.2				
Total Split (s)	60.0	60.0	60.0					40.0				
Total Split (%)	60.0%	60.0%	60.0%					40.0%				
Maximum Green (s)	55.4	55.4	55.4					34.7				
Yellow Time (s)	3.6	3.6	3.6					3.2				
All-Red Time (s)	1.0	1.0	1.0					2.1				
Lost Time Adjust (s)	-0.6	-0.6	-0.6					-0.6				
Total Lost Time (s)	4.0	4.0	4.0					4.7				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0					1.0				
Recall Mode	C-Min	C-Min	C-Min					None				
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	6.0	6.0	6.0					18.0				
Pedestrian Calls (#/hr)	0	0	0					0				
Act Effct Green (s)	85.8	85.8	85.8					5.5				
Actuated g/C Ratio	0.86	0.86	0.86					0.06				
v/c Ratio	0.11	0.21	0.01					0.09				
Control Delay	1.1	1.1	0.0					37.8				
Queue Delay	0.0	0.0	0.0					0.0				
Total Delay	1.1	1.1	0.0					37.8				
LOS	A	A	A					D				
Approach Delay		1.1						37.8				
Approach LOS		A						D				

Intersection Summary

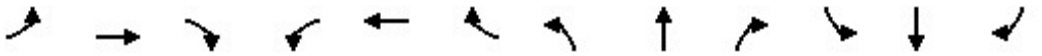
Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 80 (80%), Referenced to phase 2:EBTL and 6:, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.21
Intersection Signal Delay: 1.4 Intersection LOS: A
Intersection Capacity Utilization 27.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 28: San Saba St & Dolorosa St



Lane Group	Ø8
Turn Type	
Protected Phases	8
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.6
Minimum Split (s)	10.2
Total Split (s)	40.0
Total Split (%)	40%
Maximum Green (s)	35.4
Yellow Time (s)	3.6
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	1.0
Recall Mode	Min
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

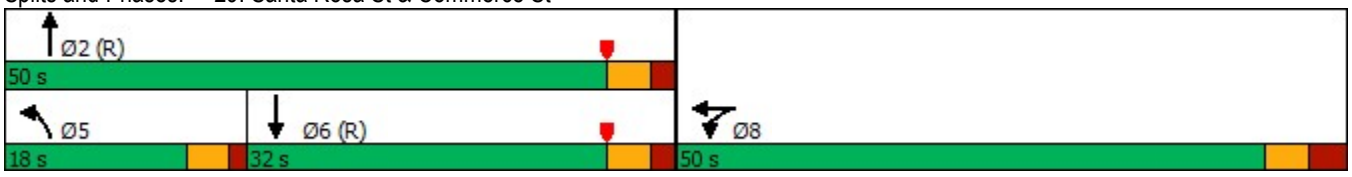


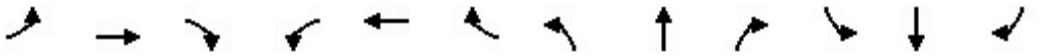
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	41	385	50	175	633	0	0	197	37
Future Volume (vph)	0	0	0	41	385	50	175	633	0	0	197	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		100	0		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Frt					0.984						0.976	
Flt Protected					0.996		0.950					
Satd. Flow (prot)	0	0	0	0	4984	0	1770	3539	0	0	3454	0
Flt Permitted					0.996		0.950					
Satd. Flow (perm)	0	0	0	0	4984	0	1770	3539	0	0	3454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					27						22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			184			374			398	
Travel Time (s)		12.8			4.2			8.5			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	49	465	60	211	764	0	0	238	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	574	0	211	764	0	0	283	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			36			36	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases												
Detector Phase				8	8		5	2			6	
Switch Phase												
Minimum Initial (s)				5.0	5.0		3.0	10.0			10.0	
Minimum Split (s)				43.2	43.2		7.4	28.2			29.2	
Total Split (s)				50.0	50.0		18.0	50.0			32.0	
Total Split (%)				50.0%	50.0%		18.0%	50.0%			32.0%	
Maximum Green (s)				43.8	43.8		13.6	44.8			26.8	
Yellow Time (s)				3.2	3.2		3.0	3.2			3.2	
All-Red Time (s)				3.0	3.0		1.4	2.0			2.0	
Lost Time Adjust (s)					-2.2		-0.4	-1.2			-1.2	
Total Lost Time (s)					4.0		4.0	4.0			4.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				Max	Max		Max	C-Max			C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				30.0	30.0			16.0			17.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					46.0		14.0	46.0			28.0	
Actuated g/C Ratio					0.46		0.14	0.46			0.28	
v/c Ratio					0.25		0.85	0.47			0.29	
Control Delay					12.8		74.2	30.7			26.9	
Queue Delay					0.7		0.0	1.0			0.0	
Total Delay					13.5		74.2	31.7			26.9	
LOS					B		E	C			C	
Approach Delay					13.5			40.9			26.9	
Approach LOS					B			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 30.1		Intersection LOS: C	
Intersection Capacity Utilization 49.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 29: Santa Rosa St & Commerce St



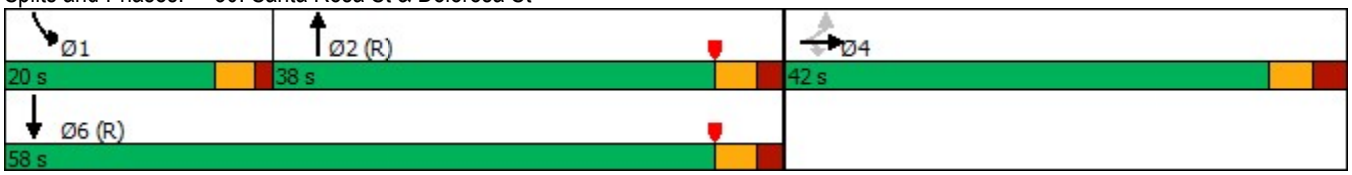


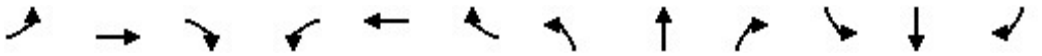
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	515	60	0	0	0	0	850	174	83	173	0
Future Volume (vph)	127	515	60	0	0	0	0	850	174	83	173	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	127		0
Storage Lanes	1		1	0		0	0		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.97	0.95	1.00
Frt			0.850					0.975				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	5085	1583	0	0	0	0	4958	0	3433	3539	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	5085	1583	0	0	0	0	4958	0	3433	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			78					47				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		565			395			416			374	
Travel Time (s)		12.8			9.0			9.5			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	166	672	78	0	0	0	0	1109	227	108	226	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	672	78	0	0	0	0	1336	0	108	226	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					100		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		4						2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4									
Detector Phase	4	4	4					2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0					10.0		3.0	10.0	
Minimum Split (s)	37.9	37.9	37.9					25.2		7.4	29.2	
Total Split (s)	42.0	42.0	42.0					38.0		20.0	58.0	
Total Split (%)	42.0%	42.0%	42.0%					38.0%		20.0%	58.0%	
Maximum Green (s)	36.1	36.1	36.1					32.8		15.6	52.8	
Yellow Time (s)	3.2	3.2	3.2					3.2		3.0	3.2	
All-Red Time (s)	2.7	2.7	2.7					2.0		1.4	2.0	
Lost Time Adjust (s)	-1.9	-1.9	-1.9					-1.2		-0.4	-1.2	
Total Lost Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	Max	Max	Max					C-Max		Max	C-Max	
Walk Time (s)	7.0	7.0	7.0					7.0			7.0	
Flash Dont Walk (s)	25.0	25.0	25.0					13.0			17.0	
Pedestrian Calls (#/hr)	0	0	0					0			0	
Act Effct Green (s)	38.0	38.0	38.0					34.0		16.0	54.0	
Actuated g/C Ratio	0.38	0.38	0.38					0.34		0.16	0.54	
v/c Ratio	0.25	0.35	0.12					0.78		0.20	0.12	
Control Delay	20.3	20.0	6.0					32.3		64.2	6.2	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay	20.3	20.0	6.0					32.3		64.2	6.2	
LOS	C	C	A					C		E	A	
Approach Delay		18.9						32.3			24.9	
Approach LOS		B						C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 40 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 26.6		Intersection LOS: C	
Intersection Capacity Utilization 49.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 30: Santa Rosa St & Dolorosa St





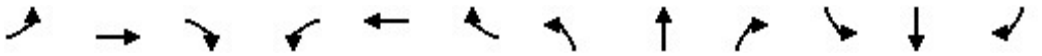
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	28	448	12	11	5	0	0	6	17
Future Volume (vph)	0	0	0	28	448	12	11	5	0	0	6	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.97							
Frt					0.996						0.899	
Flt Protected					0.997			0.967				
Satd. Flow (prot)	0	0	0	0	5050	0	0	1801	0	0	1675	0
Flt Permitted					0.997			0.884				
Satd. Flow (perm)	0	0	0	0	4892	0	0	1647	0	0	1675	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)					7							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		383			412			405			525	
Travel Time (s)		8.7			9.4			9.2			11.9	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	34	541	14	13	6	0	0	7	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	589	0	0	19	0	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				0	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				0	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			8			4	
Permitted Phases				2			8					
Detector Phase				2	2		8	8			4	
Switch Phase												
Minimum Initial (s)				10.0	10.0		5.0	5.0			5.0	
Minimum Split (s)				18.3	18.3		25.7	25.7			25.7	
Total Split (s)				68.0	68.0		32.0	32.0			32.0	
Total Split (%)				68.0%	68.0%		32.0%	32.0%			32.0%	
Maximum Green (s)				63.7	63.7		27.3	27.3			27.3	
Yellow Time (s)				3.2	3.2		3.2	3.2			3.2	
All-Red Time (s)				1.1	1.1		1.5	1.5			1.5	
Lost Time Adjust (s)					-0.3			-0.7			-0.7	
Total Lost Time (s)					4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				7.0	7.0		14.0	14.0			14.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					64.0			28.0			28.0	
Actuated g/C Ratio					0.64			0.28			0.28	
v/c Ratio					0.19			0.04			0.06	
Control Delay					7.4			19.7			27.0	
Queue Delay					0.0			0.0			0.0	
Total Delay					7.5			19.7			27.0	
LOS					A			B			C	
Approach Delay					7.5			19.7			27.0	
Approach LOS					A			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 65 (65%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.19			
Intersection Signal Delay: 8.7		Intersection LOS: A	
Intersection Capacity Utilization 24.8%		ICU Level of Service A	
Analysis Period (min) 15			

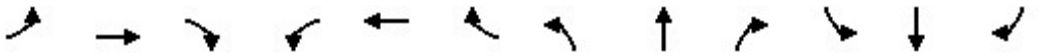
Splits and Phases: 31: Laredo St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	728	34	0	0	0	0	2	7	32	2	0
Future Volume (vph)	10	728	34	0	0	0	0	2	7	32	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993						0.899				
Flt Protected		0.999									0.955	
Satd. Flow (prot)	0	5045	0	0	0	0	0	1675	0	0	1779	0
Flt Permitted		0.999									0.955	
Satd. Flow (perm)	0	5045	0	0	0	0	0	1675	0	0	1779	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		395			843			343			405	
Travel Time (s)		9.0			19.2			7.8			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	13	950	44	0	0	0	0	3	9	42	3	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1007	0	0	0	0	0	12	0	0	45	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.6%		ICU Level of Service A	
Analysis Period (min) 15			

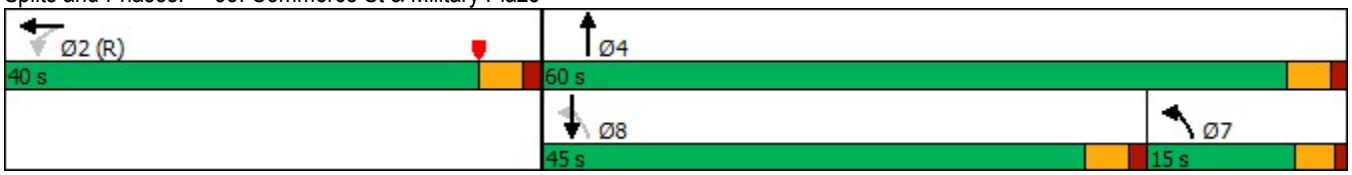


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	182	523	151	55	260	0	0	249	49
Future Volume (vph)	0	0	0	182	523	151	55	260	0	0	249	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.974						0.975	
Flt Protected					0.989			0.991				
Satd. Flow (prot)	0	0	0	0	4899	0	0	3507	0	0	3451	0
Flt Permitted					0.989			0.744				
Satd. Flow (perm)	0	0	0	0	4899	0	0	2633	0	0	3451	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					53						28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		427			265			393			470	
Travel Time (s)		9.7			6.0			8.9			10.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	220	631	182	66	314	0	0	300	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1033	0	0	380	0	0	359	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		D.P+P	NA			NA	
Protected Phases					2		7	4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2			8					
Detector Phase				2	2		7	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0		3.0	10.0			10.0	
Minimum Split (s)				14.7	14.7		10.4	38.0			14.6	
Total Split (s)				40.0	40.0		15.0	60.0			45.0	
Total Split (%)				40.0%	40.0%		15.0%	60.0%			45.0%	
Maximum Green (s)				35.3	35.3		11.0	55.4			40.4	
Yellow Time (s)				3.2	3.2		3.0	3.2			3.2	
All-Red Time (s)				1.5	1.5		1.0	1.4			1.4	
Lost Time Adjust (s)					-2.0			-2.0			-2.0	
Total Lost Time (s)					2.7			2.6			2.6	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				C-Max	C-Max		Min	Min			Min	
Act Effct Green (s)					71.6			23.1			15.6	
Actuated g/C Ratio					0.72			0.23			0.16	
v/c Ratio					0.29			0.58			0.64	
Control Delay					7.2			17.3			41.6	
Queue Delay					0.3			0.0			0.0	
Total Delay					7.5			17.3			41.6	
LOS					A			B			D	
Approach Delay					7.5			17.3			41.6	
Approach LOS					A			B			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 60 (60%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 16.5		Intersection LOS: B	
Intersection Capacity Utilization 48.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 33: Commerce St & Military Plaze



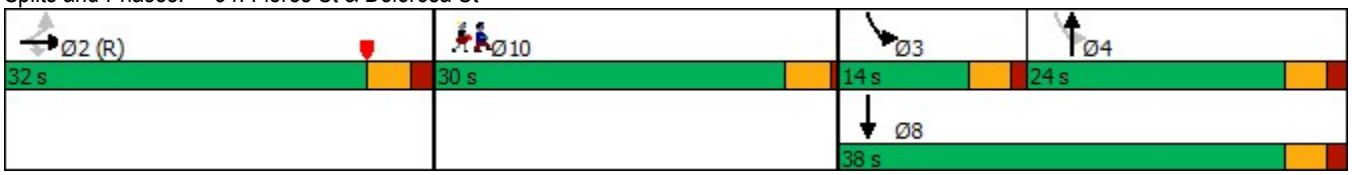
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	512	183	0	0	0	0	279	56	90	346	0
Future Volume (vph)	47	512	183	0	0	0	0	279	56	90	346	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	152		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850					0.975				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	3539	1583	0	0	0	0	3451	0	1770	3539	0
Flt Permitted	0.950									0.300		
Satd. Flow (perm)	1770	3539	1583	0	0	0	0	3451	0	559	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			234					21				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		843			462			543			393	
Travel Time (s)		19.2			10.5			12.3			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	61	668	239	0	0	0	0	364	73	117	451	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	61	668	239	0	0	0	0	437	0	117	451	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	0	100	20					100		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	0	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA		D.P+P	NA	
Protected Phases		2						4		3	8	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Growth Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2							4		
Detector Phase	2	2	2					4		3	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0		3.0	10.0	
Minimum Split (s)	15.0	15.0	15.0					14.8		7.2	14.8	
Total Split (s)	32.0	32.0	32.0					24.0		14.0	38.0	
Total Split (%)	32.0%	32.0%	32.0%					24.0%		14.0%	38.0%	
Maximum Green (s)	27.0	27.0	27.0					19.2		9.8	33.2	
Yellow Time (s)	3.2	3.2	3.2					3.2		3.0	3.2	
All-Red Time (s)	1.8	1.8	1.8					1.6		1.2	1.6	
Lost Time Adjust (s)	0.0	-1.0	0.0					-0.8		-0.2	-0.8	
Total Lost Time (s)	5.0	4.0	5.0					4.0		4.0	4.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	C-Max	C-Max	C-Max					Max		Max	Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	27.0	28.0	27.0					20.0		60.0	64.0	
Actuated g/C Ratio	0.27	0.28	0.27					0.20		0.60	0.64	
v/c Ratio	0.13	0.67	0.40					0.62		0.14	0.20	
Control Delay	19.7	25.6	6.7					39.0		8.1	6.3	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay	19.7	25.6	6.7					39.0		8.1	6.3	
LOS	B	C	A					D		A	A	
Approach Delay		20.6						39.0			6.7	
Approach LOS		C						D			A	

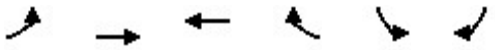
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 18 (18%), Referenced to phase 2:EBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 20.7		Intersection LOS: C	
Intersection Capacity Utilization 44.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 34: Flores St & Dolorosa St

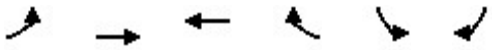


Lane Group	Ø10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	20.0
Total Split (s)	30.0
Total Split (%)	30%
Maximum Green (s)	26.0
Yellow Time (s)	3.5
All-Red Time (s)	0.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø7
Lane Configurations							
Traffic Volume (vph)	0	0	566	4	0	149	
Future Volume (vph)	0	0	566	4	0	149	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0			150	0	0	
Storage Lanes	0			0	0	1	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00	
Frt			0.999			0.865	
Flt Protected							
Satd. Flow (prot)	0	0	5080	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	0	0	5080	0	0	1611	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			1			571	
Link Speed (mph)		30	30		30		
Link Distance (ft)		265	234		513		
Travel Time (s)		6.0	5.3		11.7		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Growth Factor	111%	111%	111%	111%	111%	111%	
Adj. Flow (vph)	0	0	683	5	0	180	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	688	0	0	180	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		0		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors			2			1	
Detector Template			Thru			Right	
Leading Detector (ft)			100			20	
Trailing Detector (ft)			0			0	
Detector 1 Position(ft)			0			0	
Detector 1 Size(ft)			6			20	
Detector 1 Type			Cl+Ex			Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)			0.0			0.0	
Detector 1 Queue (s)			0.0			0.0	
Detector 1 Delay (s)			0.0			0.0	
Detector 2 Position(ft)			94				
Detector 2 Size(ft)			6				
Detector 2 Type			Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)			0.0				
Turn Type			NA			Prot	
Protected Phases			2			8	7



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø7
Permitted Phases							
Detector Phase			2			8	
Switch Phase							
Minimum Initial (s)			10.0			6.0	3.0
Minimum Split (s)			22.7			25.0	9.0
Total Split (s)			30.0			40.0	30.0
Total Split (%)			30.0%			40.0%	30%
Maximum Green (s)			25.3			36.0	26.0
Yellow Time (s)			3.2			3.0	3.5
All-Red Time (s)			1.5			1.0	0.5
Lost Time Adjust (s)			-1.7			-2.0	
Total Lost Time (s)			3.0			2.0	
Lead/Lag						Lag	Lead
Lead-Lag Optimize?						Yes	Yes
Vehicle Extension (s)			1.0			1.0	3.0
Recall Mode			C-Max			None	None
Walk Time (s)			7.0			7.0	
Flash Dont Walk (s)			10.0			12.0	
Pedestrian Calls (#/hr)			0			0	
Act Effct Green (s)			87.0			8.0	
Actuated g/C Ratio			0.87			0.08	
v/c Ratio			0.16			0.28	
Control Delay			0.2			1.0	
Queue Delay			0.2			0.0	
Total Delay			0.4			1.0	
LOS			A			A	
Approach Delay			0.4		1.0		
Approach LOS			A		A		

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 13 (13%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay: 0.5		Intersection LOS: A	
Intersection Capacity Utilization 29.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 35: Commerce St & N Main Ave

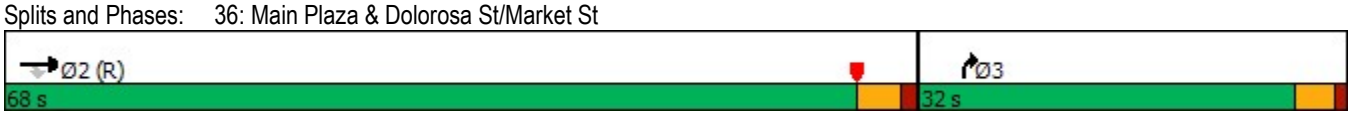


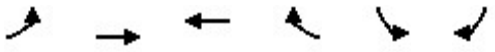
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	658	0	0	0	0	4
Future Volume (vph)	658	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	0		0	0
Storage Lanes		1	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	1863	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	1863	0	0	0	1611
Right Turn on Red		Yes				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	462			507	380	
Travel Time (s)	10.5			11.5	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	844	0	0	0	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	844	0	0	0	0	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1				1
Detector Template	Thru					Right
Leading Detector (ft)	100	0				20
Trailing Detector (ft)	0	0				0
Detector 1 Position(ft)	0	0				0
Detector 1 Size(ft)	6	0				20
Detector 1 Type	Cl+Ex	Cl+Ex				Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0				0.0
Detector 1 Queue (s)	0.0	0.0				0.0
Detector 1 Delay (s)	0.0	0.0				0.0
Detector 2 Position(ft)	94					
Detector 2 Size(ft)	6					
Detector 2 Type	Cl+Ex					
Detector 2 Channel						
Detector 2 Extend (s)	0.0					
Turn Type	NA	Perm				Prot
Protected Phases	2					3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases		2				
Detector Phase	2	2				3
Switch Phase						
Minimum Initial (s)	10.0	10.0				3.0
Minimum Split (s)	22.6	22.6				22.0
Total Split (s)	68.0	68.0				32.0
Total Split (%)	68.0%	68.0%				32.0%
Maximum Green (s)	63.4	63.4				28.0
Yellow Time (s)	3.2	3.2				3.0
All-Red Time (s)	1.4	1.4				1.0
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	4.6	4.6				4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0	1.0				1.0
Recall Mode	C-Max	C-Max				Max
Walk Time (s)						7.0
Flash Dont Walk (s)						11.0
Pedestrian Calls (#/hr)						0
Act Effct Green (s)	63.4					28.0
Actuated g/C Ratio	0.63					0.28
v/c Ratio	0.38					0.01
Control Delay	2.0					26.2
Queue Delay	0.0					0.0
Total Delay	2.1					26.2
LOS	A					C
Approach Delay	2.1				26.2	
Approach LOS	A				C	

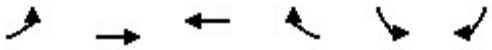
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 30 (30%), Referenced to phase 2:EBT, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 2.2		Intersection LOS: A	
Intersection Capacity Utilization 32.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 36: Main Plaza & Dolorosa St/Market St





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø7
Lane Configurations							
Traffic Volume (vph)	0	0	568	217	0	4	
Future Volume (vph)	0	0	568	217	0	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0			150	0	0	
Storage Lanes	0			0	0	1	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00	
Frt			0.959			0.865	
Flt Protected							
Satd. Flow (prot)	0	0	4877	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	0	0	4877	0	0	1611	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			92			567	
Link Speed (mph)		30	30		30		
Link Distance (ft)		234	520		565		
Travel Time (s)		5.3	11.8		12.8		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Growth Factor	111%	111%	111%	111%	111%	111%	
Adj. Flow (vph)	0	0	685	262	0	5	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	947	0	0	5	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		0		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors			2			1	
Detector Template			Thru			Right	
Leading Detector (ft)			100			20	
Trailing Detector (ft)			0			0	
Detector 1 Position(ft)			0			0	
Detector 1 Size(ft)			6			20	
Detector 1 Type			Cl+Ex			Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)			0.0			0.0	
Detector 1 Queue (s)			0.0			0.0	
Detector 1 Delay (s)			0.0			0.0	
Detector 2 Position(ft)			94				
Detector 2 Size(ft)			6				
Detector 2 Type			Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)			0.0				
Turn Type			NA			Prot	
Protected Phases			2			8	7

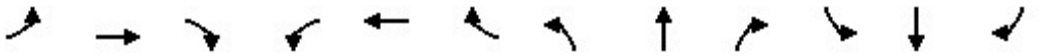


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø7
Permitted Phases							
Detector Phase			2			8	
Switch Phase							
Minimum Initial (s)			10.0			3.0	5.0
Minimum Split (s)			22.7			25.0	9.0
Total Split (s)			30.0			40.0	30.0
Total Split (%)			30.0%			40.0%	30%
Maximum Green (s)			25.3			36.0	26.0
Yellow Time (s)			3.2			3.0	3.5
All-Red Time (s)			1.5			1.0	0.5
Lost Time Adjust (s)			0.0			0.0	
Total Lost Time (s)			4.7			4.0	
Lead/Lag						Lag	Lead
Lead-Lag Optimize?						Yes	Yes
Vehicle Extension (s)			1.0			1.0	3.0
Recall Mode			C-Max			Min	None
Walk Time (s)			7.0			7.0	
Flash Dont Walk (s)			10.0			14.0	
Pedestrian Calls (#/hr)			0			0	
Act Effct Green (s)			87.8			3.5	
Actuated g/C Ratio			0.88			0.04	
v/c Ratio			0.22			0.01	
Control Delay			0.5			0.0	
Queue Delay			0.0			0.0	
Total Delay			0.5			0.0	
LOS			A			A	
Approach Delay			0.5				
Approach LOS			A				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 13 (13%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.22			
Intersection Signal Delay: 0.5		Intersection LOS: A	
Intersection Capacity Utilization 28.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Commerce St & Soledad St



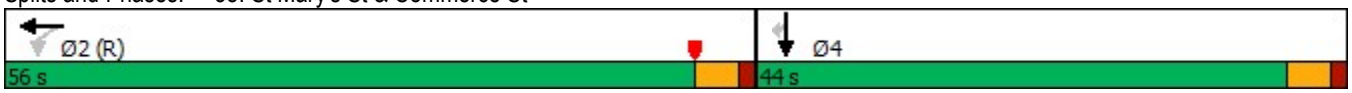


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	158	709	0	0	0	0	0	298	84
Future Volume (vph)	0	0	0	158	709	0	0	0	0	0	298	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		150
Storage Lanes	0		0	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												0.850
Flt Protected					0.991							
Satd. Flow (prot)	0	0	0	0	5040	0	0	0	0	0	3539	1583
Flt Permitted					0.991							
Satd. Flow (perm)	0	0	0	0	5040	0	0	0	0	0	3539	1583
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)												101
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		520			534			212			290	
Travel Time (s)		11.8			12.1			4.8			6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	191	855	0	0	0	0	0	360	101
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1046	0	0	0	0	0	360	101
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	Right
Leading Detector (ft)				0	100						100	20
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				0	6						6	20
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	Perm
Protected Phases					2						4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2								4
Detector Phase				2	2						4	4
Switch Phase												
Minimum Initial (s)				10.0	10.0						5.0	5.0
Minimum Split (s)				26.6	26.6						26.6	26.6
Total Split (s)				56.0	56.0						44.0	44.0
Total Split (%)				56.0%	56.0%						44.0%	44.0%
Maximum Green (s)				51.4	51.4						39.4	39.4
Yellow Time (s)				3.2	3.2						3.2	3.2
All-Red Time (s)				1.4	1.4						1.4	1.4
Lost Time Adjust (s)					-0.6						-0.6	0.0
Total Lost Time (s)					4.0						4.0	4.6
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0						1.0	1.0
Recall Mode				C-Max	C-Max						Max	Max
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Dont Walk (s)				15.0	15.0						15.0	15.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)					52.0						40.0	39.4
Actuated g/C Ratio					0.52						0.40	0.39
v/c Ratio					0.40						0.25	0.15
Control Delay					5.8						20.6	4.6
Queue Delay					0.0						0.1	0.0
Total Delay					5.8						20.7	4.6
LOS					A						C	A
Approach Delay					5.8						17.2	
Approach LOS					A						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 7 (7%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 9.3		Intersection LOS: A	
Intersection Capacity Utilization 34.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 38: St Mary's St & Commerce St

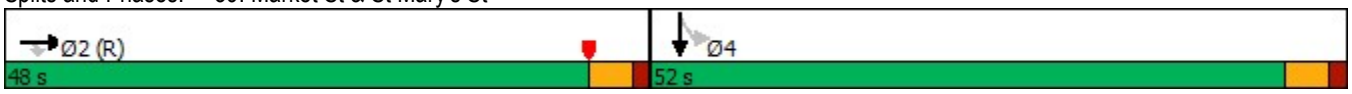


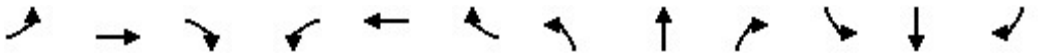
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	578	201	0	0	0	0	0	0	160	224	0
Future Volume (vph)	0	578	201	0	0	0	0	0	0	160	224	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	0		0	0		150
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									
Flt Protected											0.980	
Satd. Flow (prot)	0	3390	1441	0	0	0	0	0	0	0	3468	0
Flt Permitted											0.980	
Satd. Flow (perm)	0	3390	1441	0	0	0	0	0	0	0	3468	0
Right Turn on Red			Yes			Yes			Yes	No		Yes
Satd. Flow (RTOR)			202									
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		507			530			201			212	
Travel Time (s)		11.5			12.0			4.6			4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	0	741	258	0	0	0	0	0	0	205	287	0
Shared Lane Traffic (%)			0%									
Lane Group Flow (vph)	0	741	258	0	0	0	0	0	0	0	492	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1							1	2	
Detector Template		Thru	Right							Left	Thru	
Leading Detector (ft)		100	20							0	100	
Trailing Detector (ft)		0	0							0	0	
Detector 1 Position(ft)		0	0							0	0	
Detector 1 Size(ft)		6	20							0	6	
Detector 1 Type		Cl+Ex	Cl+Ex							Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0							0.0	0.0	
Detector 1 Queue (s)		0.0	0.0							0.0	0.0	
Detector 1 Delay (s)		0.0	0.0							0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2							4		
Detector Phase		2	2							4	4	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		14.5	14.5							14.7	14.7	
Total Split (s)		48.0	48.0							52.0	52.0	
Total Split (%)		48.0%	48.0%							52.0%	52.0%	
Maximum Green (s)		43.5	43.5							47.3	47.3	
Yellow Time (s)		3.2	3.2							3.2	3.2	
All-Red Time (s)		1.3	1.3							1.5	1.5	
Lost Time Adjust (s)		-0.5	0.0								-0.7	
Total Lost Time (s)		4.0	4.5								4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0	1.0							1.0	1.0	
Recall Mode		C-Max	C-Max							Max	Max	
Act Effct Green (s)		44.0	43.5								48.0	
Actuated g/C Ratio		0.44	0.44								0.48	
v/c Ratio		0.50	0.35								0.30	
Control Delay		6.2	1.7								20.5	
Queue Delay		0.0	0.0								3.4	
Total Delay		6.2	1.7								23.9	
LOS		A	A								C	
Approach Delay		5.0									23.9	
Approach LOS		A									C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 45 (45%), Referenced to phase 2:EBT, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 11.2		Intersection LOS: B	
Intersection Capacity Utilization 40.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 39: Market St & St Mary's St



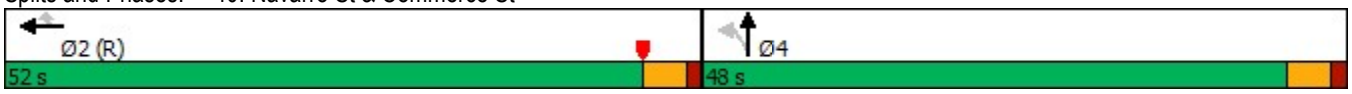


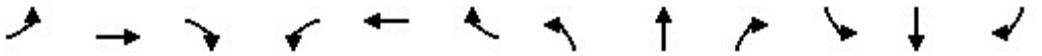
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1096	198	157	508	0	0	0	0
Future Volume (vph)	0	0	0	0	1096	198	157	508	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt						0.850						
Flt Protected								0.988				
Satd. Flow (prot)	0	0	0	0	5085	1583	0	5024	0	0	0	0
Flt Permitted								0.988				
Satd. Flow (perm)	0	0	0	0	5085	1583	0	5024	0	0	0	0
Right Turn on Red			Yes			Yes	No		Yes			Yes
Satd. Flow (RTOR)						186						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		534			258			251			297	
Travel Time (s)		12.1			5.9			5.7			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	0	1322	239	189	613	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1322	239	0	802	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	0	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	0	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					2			4				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						2	4					
Detector Phase					2	2	4	4				
Switch Phase												
Minimum Initial (s)					10.0	10.0	5.0	5.0				
Minimum Split (s)					14.5	14.5	9.6	9.6				
Total Split (s)					52.0	52.0	48.0	48.0				
Total Split (%)					52.0%	52.0%	48.0%	48.0%				
Maximum Green (s)					47.5	47.5	43.4	43.4				
Yellow Time (s)					3.2	3.2	3.2	3.2				
All-Red Time (s)					1.3	1.3	1.4	1.4				
Lost Time Adjust (s)					-1.7	-1.7		-2.0				
Total Lost Time (s)					2.8	2.8		2.6				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					1.0	1.0	1.0	1.0				
Recall Mode					C-Max	C-Max	Max	Max				
Act Effct Green (s)					49.2	49.2		45.4				
Actuated g/C Ratio					0.49	0.49		0.45				
v/c Ratio					0.53	0.27		0.35				
Control Delay					5.0	1.2		14.8				
Queue Delay					0.2	0.5		0.6				
Total Delay					5.1	1.7		15.4				
LOS					A	A		B				
Approach Delay					4.6			15.4				
Approach LOS					A			B				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 85 (85%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 8.3		Intersection LOS: A	
Intersection Capacity Utilization 44.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Navarro St & Commerce St



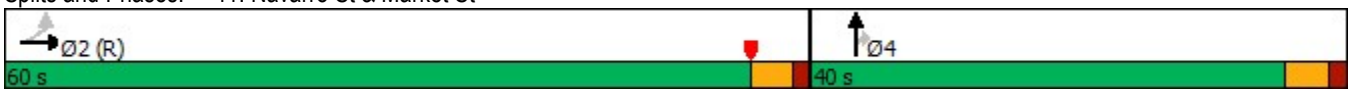


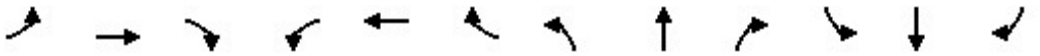
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	257	487	0	0	0	0	0	361	59	0	0	0
Future Volume (vph)	257	487	0	0	0	0	0	361	59	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected		0.983										
Satd. Flow (prot)	0	3479	0	0	0	0	0	3539	1583	0	0	0
Flt Permitted		0.983										
Satd. Flow (perm)	0	3479	0	0	0	0	0	3539	1583	0	0	0
Right Turn on Red	No		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									76			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		530			259			275			251	
Travel Time (s)		12.0			5.9			6.3			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	330	625	0	0	0	0	0	463	76	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	955	0	0	0	0	0	463	76	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2	1			
Detector Template	Left	Thru						Thru	Right			
Leading Detector (ft)	0	100						100	20			
Trailing Detector (ft)	0	0						0	0			
Detector 1 Position(ft)	0	0						0	0			
Detector 1 Size(ft)	0	6						6	20			
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0	0.0			
Detector 1 Queue (s)	0.0	0.0						0.0	0.0			
Detector 1 Delay (s)	0.0	0.0						0.0	0.0			
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0				
Turn Type	Perm	NA						NA	Perm			
Protected Phases		2						4				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2								4			
Detector Phase	2	2						4	4			
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0	10.0			
Minimum Split (s)	14.5	14.5						14.7	14.7			
Total Split (s)	60.0	60.0						40.0	40.0			
Total Split (%)	60.0%	60.0%						40.0%	40.0%			
Maximum Green (s)	55.5	55.5						35.3	35.3			
Yellow Time (s)	3.2	3.2						3.2	3.2			
All-Red Time (s)	1.3	1.3						1.5	1.5			
Lost Time Adjust (s)		-1.7						-2.0	-2.0			
Total Lost Time (s)		2.8						2.7	2.7			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0	1.0			
Recall Mode	C-Max	C-Max						Max	Max			
Act Effct Green (s)		57.2						37.3	37.3			
Actuated g/C Ratio		0.57						0.37	0.37			
v/c Ratio		0.48						0.35	0.12			
Control Delay		4.6						23.6	5.4			
Queue Delay		0.0						0.0	0.0			
Total Delay		4.6						23.6	5.4			
LOS		A						C	A			
Approach Delay		4.6						21.0				
Approach LOS		A						C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 75 (75%), Referenced to phase 2:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay: 10.6		Intersection LOS: B	
Intersection Capacity Utilization 43.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Navarro St & Market St



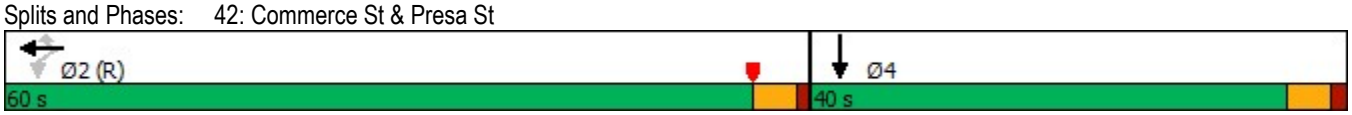


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	61	1014	68	0	0	0	0	32	12
Future Volume (vph)	0	0	0	61	1014	68	0	0	0	0	32	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.80						
Frt						0.850					0.964	
Flt Protected					0.997							
Satd. Flow (prot)	0	0	0	0	5070	1583	0	0	0	0	1796	0
Flt Permitted					0.997							
Satd. Flow (perm)	0	0	0	0	5070	1273	0	0	0	0	1796	0
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)						82					14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		258			287			262			386	
Travel Time (s)		5.9			6.5			6.0			8.8	
Confl. Peds. (#/hr)						200						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	74	1223	82	0	0	0	0	39	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1297	82	0	0	0	0	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1					2	
Detector Template				Left	Thru	Right					Thru	
Leading Detector (ft)				0	100	20					100	
Trailing Detector (ft)				0	0	0					0	
Detector 1 Position(ft)				0	0	0					0	
Detector 1 Size(ft)				0	6	20					6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0					0.0	
Detector 1 Queue (s)				0.0	0.0	0.0					0.0	
Detector 1 Delay (s)				0.0	0.0	0.0					0.0	
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA	Perm					NA	
Protected Phases					2						4	
Permitted Phases				2		2						
Detector Phase				2	2	2					4	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0					5.0	
Minimum Split (s)				14.3	14.3	14.3					9.6	
Total Split (s)				60.0	60.0	60.0					40.0	
Total Split (%)				60.0%	60.0%	60.0%					40.0%	
Maximum Green (s)				55.7	55.7	55.7					35.4	
Yellow Time (s)				3.2	3.2	3.2					3.2	
All-Red Time (s)				1.1	1.1	1.1					1.4	
Lost Time Adjust (s)					-0.3	0.0					-0.6	
Total Lost Time (s)					4.0	4.3					4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0					1.0	
Recall Mode				C-Max	C-Max	C-Max					Max	
Act Effct Green (s)					56.0	55.7					36.0	
Actuated g/C Ratio					0.56	0.56					0.36	
v/c Ratio					0.46	0.11					0.08	
Control Delay					3.8	0.7					17.1	
Queue Delay					0.5	0.0					0.0	
Total Delay					4.2	0.7					17.1	
LOS					A	A					B	
Approach Delay					4.0						17.1	
Approach LOS					A						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 80 (80%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay: 4.5		Intersection LOS: A	
Intersection Capacity Utilization 34.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 42: Commerce St & Presa St

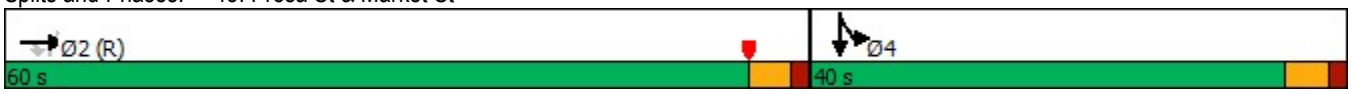


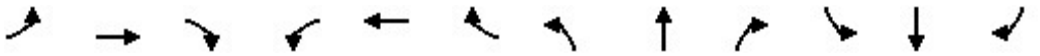
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	534	12	0	0	0	0	0	9	37	21	0
Future Volume (vph)	0	534	12	0	0	0	0	0	9	37	21	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		130	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850						0.865			
Flt Protected										0.950		
Satd. Flow (prot)	0	3390	1441	0	0	0	0	0	1611	1681	1770	0
Flt Permitted										0.950		
Satd. Flow (perm)	0	3390	1441	0	0	0	0	0	1611	1681	1770	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			19						924	47		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		259			497			339			262	
Travel Time (s)		5.9			11.3			7.7			6.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	0	685	15	0	0	0	0	0	12	47	27	0
Shared Lane Traffic (%)			0%							0%		
Lane Group Flow (vph)	0	685	15	0	0	0	0	0	12	47	27	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1						1	1	2	
Detector Template		Thru	Right						Right	Left	Thru	
Leading Detector (ft)		100	20						20	20	100	
Trailing Detector (ft)		0	0						0	0	0	
Detector 1 Position(ft)		0	0						0	0	0	
Detector 1 Size(ft)		6	20						20	20	6	
Detector 1 Type		Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0						0.0	0.0	0.0	
Detector 1 Queue (s)		0.0	0.0						0.0	0.0	0.0	
Detector 1 Delay (s)		0.0	0.0						0.0	0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA	Perm						Perm	Split	NA	
Protected Phases		2								4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2						2			
Detector Phase		2	2						2	4	4	
Switch Phase												
Minimum Initial (s)		10.0	10.0						10.0	5.0	5.0	
Minimum Split (s)		14.7	14.7						14.7	9.7	9.7	
Total Split (s)		60.0	60.0						60.0	40.0	40.0	
Total Split (%)		60.0%	60.0%						60.0%	40.0%	40.0%	
Maximum Green (s)		55.3	55.3						55.3	35.3	35.3	
Yellow Time (s)		3.2	3.2						3.2	3.2	3.2	
All-Red Time (s)		1.5	1.5						1.5	1.5	1.5	
Lost Time Adjust (s)		-0.7	-0.7						-0.7	-0.7	-0.7	
Total Lost Time (s)		4.0	4.0						4.0	4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0	1.0						1.0	1.0	1.0	
Recall Mode		C-Max	C-Max						C-Max	Max	Max	
Act Effct Green (s)		56.0	56.0						56.0	36.0	36.0	
Actuated g/C Ratio		0.56	0.56						0.56	0.36	0.36	
v/c Ratio		0.36	0.02						0.01	0.07	0.04	
Control Delay		2.4	0.1						0.0	8.5	20.8	
Queue Delay		0.2	0.0						0.0	0.0	0.0	
Total Delay		2.6	0.1						0.0	8.5	20.8	
LOS		A	A						A	A	C	
Approach Delay		2.5									13.0	
Approach LOS		A									B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 80 (80%), Referenced to phase 2:EBT, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay: 3.5		Intersection LOS: A	
Intersection Capacity Utilization 34.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 43: Presa St & Market St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	118	1139	0	0	0	0	0	179	78
Future Volume (vph)	0	0	0	118	1139	0	0	0	0	0	179	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt											0.955	
Flt Protected					0.995							
Satd. Flow (prot)	0	0	0	0	5060	0	0	0	0	0	3380	0
Flt Permitted					0.995							
Satd. Flow (perm)	0	0	0	0	5060	0	0	0	0	0	3380	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)					31						60	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		287			180			181			345	
Travel Time (s)		6.5			4.1			4.1			7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	142	1374	0	0	0	0	0	216	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1516	0	0	0	0	0	310	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	
Detector Template				Left	Thru						Thru	
Leading Detector (ft)				20	100						100	
Trailing Detector (ft)				0	0						0	
Detector 1 Position(ft)				0	0						0	
Detector 1 Size(ft)				20	6						6	
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	
Detector 1 Queue (s)				0.0	0.0						0.0	
Detector 1 Delay (s)				0.0	0.0						0.0	
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Prot	NA						NA	
Protected Phases				3	2						4	

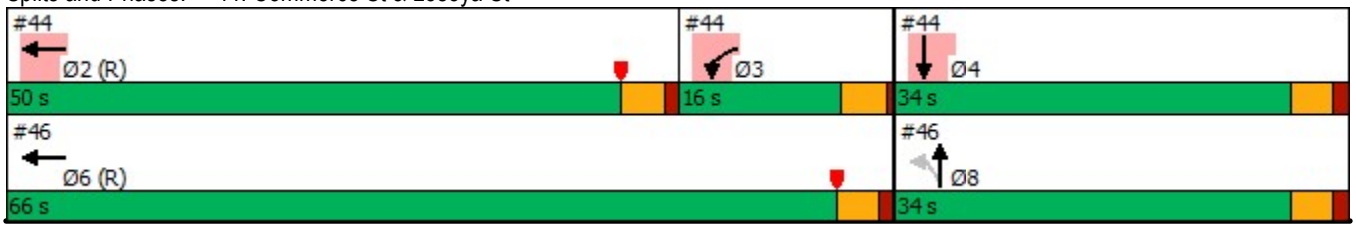
Lane Group	Ø6	Ø8
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Growth Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	6	8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases												
Detector Phase				3	2						4	
Switch Phase												
Minimum Initial (s)				3.2	10.0						5.7	
Minimum Split (s)				7.2	14.5						10.2	
Total Split (s)				16.0	50.0						34.0	
Total Split (%)				16.0%	50.0%						34.0%	
Maximum Green (s)				12.0	45.7						29.5	
Yellow Time (s)				3.5	3.2						3.2	
All-Red Time (s)				0.5	1.1						1.3	
Lost Time Adjust (s)					-1.3						-2.0	
Total Lost Time (s)					3.0						2.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	1.0						1.0	
Recall Mode				None	C-Max						Max	
Walk Time (s)					7.0						7.0	
Flash Dont Walk (s)					10.0						12.0	
Pedestrian Calls (#/hr)					0						0	
Act Effct Green (s)					63.0						31.5	
Actuated g/C Ratio					0.63						0.32	
v/c Ratio					4.58dl						0.28	
Control Delay					9.0						21.3	
Queue Delay					0.0						0.0	
Total Delay					9.0						21.3	
LOS					A						C	
Approach Delay					9.0						21.3	
Approach LOS					A						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 70.2 (70%), Referenced to phase 2:WBT and 6:, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 11.1		Intersection LOS: B	
Intersection Capacity Utilization 42.0%		ICU Level of Service A	
Analysis Period (min) 15			

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 44: Commerce St & Losoya St



Lane Group	Ø6	Ø8
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	9.8	5.3
Minimum Split (s)	14.3	9.8
Total Split (s)	66.0	34.0
Total Split (%)	66%	34%
Maximum Green (s)	61.7	29.5
Yellow Time (s)	3.2	3.2
All-Red Time (s)	1.1	1.3
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	1.0	1.0
Recall Mode	C-Max	Min
Walk Time (s)	7.0	
Flash Dont Walk (s)	10.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		

Intersection Summary

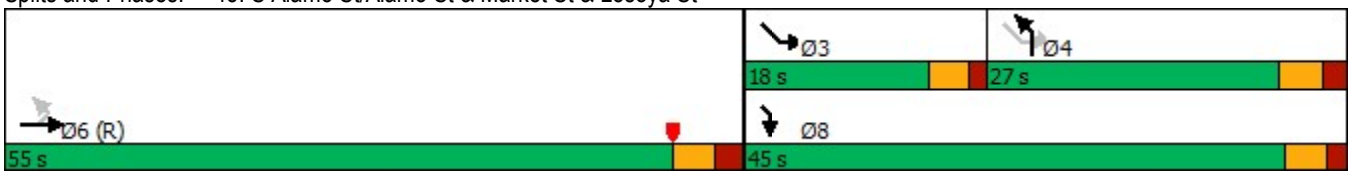


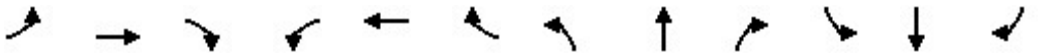
Lane Group	EBL2	EBT	EBR	NBL	NBR	SEL	SER
Lane Configurations							
Traffic Volume (vph)	67	484	61	229	244	283	264
Future Volume (vph)	67	484	61	229	244	283	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			100	0	0	0	0
Storage Lanes			1	2	1	1	2
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	1.00	0.97	1.00	1.00	0.91
Frt			0.850		0.850	0.954	0.850
Flt Protected		0.994		0.950		0.966	
Satd. Flow (prot)	0	3518	1583	3433	1583	1717	2882
Flt Permitted		0.994		0.950		0.490	
Satd. Flow (perm)	0	3518	1583	3433	1583	871	2882
Right Turn on Red			Yes		Yes		
Satd. Flow (RTOR)			129		211		
Link Speed (mph)		30				30	
Link Distance (ft)		497				153	
Travel Time (s)		11.3				3.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	86	621	78	294	313	363	339
Shared Lane Traffic (%)							47%
Lane Group Flow (vph)	0	707	78	294	313	522	180
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Right
Median Width(ft)		0				12	
Link Offset(ft)		0				0	
Crosswalk Width(ft)		16				16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15	9	15	9
Number of Detectors	1	2	1	1	1	1	1
Detector Template	Left	Thru	Right	Left	Right	Left	Right
Leading Detector (ft)	20	100	20	20	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94					
Detector 2 Size(ft)		6					
Detector 2 Type		Cl+Ex					
Detector 2 Channel							
Detector 2 Extend (s)		0.0					
Turn Type	Perm	NA	NA	Prot	Perm	D.P+P	Prot
Protected Phases		6		4		3	8

Lane Group	EBL2	EBT	EBR	NBL	NBR	SEL	SER
Permitted Phases	6				4	4	
Detector Phase	6	6		4	4	3	8
Switch Phase							
Minimum Initial (s)	10.0	10.0		5.0	5.0	3.0	5.0
Minimum Split (s)	15.3	15.3		10.2	10.2	7.3	9.8
Total Split (s)	55.0	55.0		27.0	27.0	18.0	45.0
Total Split (%)	55.0%	55.0%		27.0%	27.0%	18.0%	45.0%
Maximum Green (s)	49.7	49.7		21.8	21.8	13.7	40.2
Yellow Time (s)	3.2	3.2		3.2	3.2	3.0	3.2
All-Red Time (s)	2.1	2.1		2.0	2.0	1.3	1.6
Lost Time Adjust (s)		-1.3		0.0	-1.2	-0.3	-0.8
Total Lost Time (s)		4.0		5.2	4.0	4.0	4.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0	1.0	1.0
Recall Mode	C-Min	C-Min		Min	Min	Min	Min
Walk Time (s)	7.0	7.0		7.0	7.0		7.0
Flash Dont Walk (s)	20.0	20.0		15.0	15.0		14.0
Pedestrian Calls (#/hr)	0	0		0	0		0
Act Effct Green (s)		36.2	0.0	13.1	14.3	51.8	55.8
Actuated g/C Ratio		0.36	0.00	0.13	0.14	0.52	0.56
v/c Ratio		0.56	0.60	0.65	0.77	0.68	0.11
Control Delay		16.7	37.2	47.6	26.5	21.2	8.9
Queue Delay		0.0	0.0	0.0	0.0	3.4	0.0
Total Delay		16.7	37.2	47.6	26.5	24.5	8.9
LOS		B	D	D	C	C	A
Approach Delay		18.8				20.5	
Approach LOS		B				C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 85 (85%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 24.6		Intersection LOS: C	
Intersection Capacity Utilization 58.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 45: S Alamo St/Alamo St & Market St & Losoya St





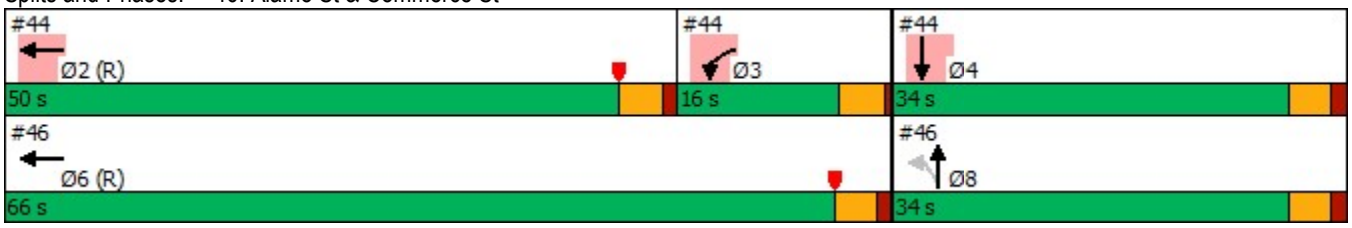
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1280	16	91	223	0	0	0	4
Future Volume (vph)	0	0	0	0	1280	16	91	223	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00
Frt					0.998						0.850	
Flt Protected							0.950	0.998				
Satd. Flow (prot)	0	0	0	0	5075	0	1681	1766	0	0	0	0
Flt Permitted							0.950	0.998				
Satd. Flow (perm)	0	0	0	0	5075	0	1681	1766	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					3		61	61			110	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		180			468			263			375	
Travel Time (s)		4.1			10.6			6.0			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	114%	114%	111%	111%	111%	111%	111%	111%	114%	111%
Adj. Flow (vph)	0	0	0	0	1544	19	110	269	0	0	0	5
Shared Lane Traffic (%)							10%					
Lane Group Flow (vph)	0	0	0	0	1563	0	99	280	0	0	5	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2		1	2				
Detector Template					Thru		Left	Thru				
Leading Detector (ft)					100		20	100				
Trailing Detector (ft)					0		0	0				
Detector 1 Position(ft)					0		0	0				
Detector 1 Size(ft)					6		20	6				
Detector 1 Type					Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0		0.0	0.0				
Detector 1 Queue (s)					0.0		0.0	0.0				
Detector 1 Delay (s)					0.0		0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA		Perm	NA				
Protected Phases					6			8				

Lane Group	Ø2	Ø3	Ø4
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Growth Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Number of Detectors			
Detector Template			
Leading Detector (ft)			
Trailing Detector (ft)			
Detector 1 Position(ft)			
Detector 1 Size(ft)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Detector 2 Position(ft)			
Detector 2 Size(ft)			
Detector 2 Type			
Detector 2 Channel			
Detector 2 Extend (s)			
Turn Type			
Protected Phases	2	3	4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8					
Detector Phase					6		8	8				
Switch Phase												
Minimum Initial (s)					9.8		5.3	5.3				
Minimum Split (s)					14.3		9.8	9.8				
Total Split (s)					66.0		34.0	34.0				
Total Split (%)					66.0%		34.0%	34.0%				
Maximum Green (s)					61.7		29.5	29.5				
Yellow Time (s)					3.2		3.2	3.2				
All-Red Time (s)					1.1		1.3	1.3				
Lost Time Adjust (s)					-1.7		0.0	0.0				
Total Lost Time (s)					2.6		4.5	4.5				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					1.0		1.0	1.0				
Recall Mode					C-Max		Min	Min				
Walk Time (s)					7.0							
Flash Dont Walk (s)					10.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)					63.4		29.5	29.5			0.0	
Actuated g/C Ratio					0.63		0.30	0.30			0.00	
v/c Ratio					0.49		0.18	0.50			0.05	
Control Delay					9.6		12.9	26.0			0.0	
Queue Delay					0.2		0.0	5.4			0.0	
Total Delay					9.7		12.9	31.5			0.0	
LOS					A		B	C			A	
Approach Delay					9.7			26.6				
Approach LOS					A			C				

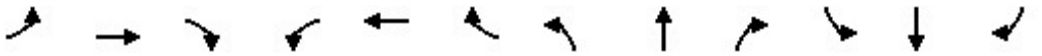
Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 70.2 (70%), Referenced to phase 2:WBT and 6:, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 13.0	Intersection LOS: B
Intersection Capacity Utilization Err%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 46: Alamo St & Commerce St



Lane Group	Ø2	Ø3	Ø4
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	10.0	3.2	5.7
Minimum Split (s)	14.5	7.2	10.2
Total Split (s)	50.0	16.0	34.0
Total Split (%)	50%	16%	34%
Maximum Green (s)	45.7	12.0	29.5
Yellow Time (s)	3.2	3.5	3.2
All-Red Time (s)	1.1	0.5	1.3
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag			
Lead-Lag Optimize?			
Vehicle Extension (s)	1.0	3.0	1.0
Recall Mode	C-Max	None	Max
Walk Time (s)	7.0		7.0
Flash Dont Walk (s)	10.0		12.0
Pedestrian Calls (#/hr)	0		0
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			

Intersection Summary



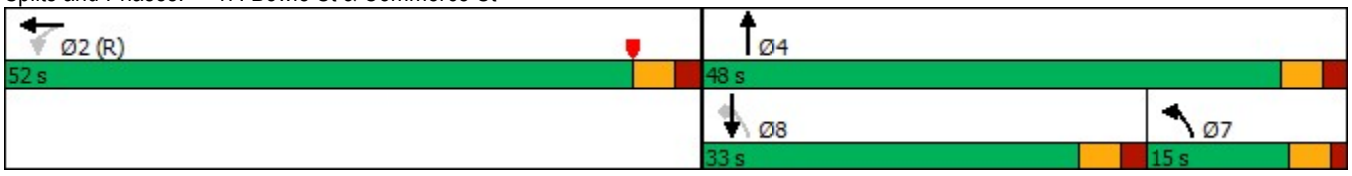
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	208	1368	223	4	61	0	0	214	53
Future Volume (vph)	0	0	0	208	1368	223	4	61	0	0	214	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	116		150	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	0.95	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor				0.79								
Frt					0.979							0.850
Flt Protected				0.950				0.997				
Satd. Flow (prot)	0	0	0	1770	4979	0	0	3529	0	0	3539	1583
Flt Permitted				0.950				0.953				
Satd. Flow (perm)	0	0	0	1390	4979	0	0	3373	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					43							81
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		960			314			287			349	
Travel Time (s)		21.8			7.1			6.5			7.9	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	251	1651	269	5	74	0	0	258	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	251	1920	0	0	79	0	0	258	64
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	1
Detector Template				Left	Thru		Left	Thru			Thru	Right
Leading Detector (ft)				20	100		0	100			100	20
Trailing Detector (ft)				0	0		0	0			0	0
Detector 1 Position(ft)				0	0		0	0			0	0
Detector 1 Size(ft)				20	6		0	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

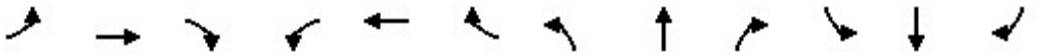
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		D.P+P	NA			NA	Perm
Protected Phases					2		7	4			8	
Permitted Phases				2			8					8
Detector Phase				2	2		7	4			8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0		3.0	5.0			5.0	5.0
Minimum Split (s)				33.3	33.3		7.4	29.1			27.1	27.1
Total Split (s)				52.0	52.0		15.0	48.0			33.0	33.0
Total Split (%)				52.0%	52.0%		15.0%	48.0%			33.0%	33.0%
Maximum Green (s)				46.7	46.7		10.6	42.9			27.9	27.9
Yellow Time (s)				3.2	3.2		3.0	3.2			3.2	3.2
All-Red Time (s)				2.1	2.1		1.4	1.9			1.9	1.9
Lost Time Adjust (s)				-1.3	-1.3			-1.1			-1.1	-1.1
Total Lost Time (s)				4.0	4.0			4.0			4.0	4.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0		1.0	1.0			1.0	1.0
Recall Mode				C-Max	C-Max		Max	Max			Max	Max
Walk Time (s)				7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)				21.0	21.0			17.0			15.0	15.0
Pedestrian Calls (#/hr)				0	0			0			0	0
Act Effct Green (s)				48.0	48.0			44.0			29.0	29.0
Actuated g/C Ratio				0.48	0.48			0.44			0.29	0.29
v/c Ratio				0.38	0.80			0.05			0.25	0.12
Control Delay				18.6	24.5			26.3			28.0	4.8
Queue Delay				0.0	0.0			0.0			0.0	0.0
Total Delay				18.6	24.5			26.3			28.0	4.8
LOS				B	C			C			C	A
Approach Delay					23.8			26.3			23.4	
Approach LOS					C			C			C	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 25 (25%), Referenced to phase 2:WBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 23.8 Intersection LOS: C
Intersection Capacity Utilization 53.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 47: Bowie St & Commerce St





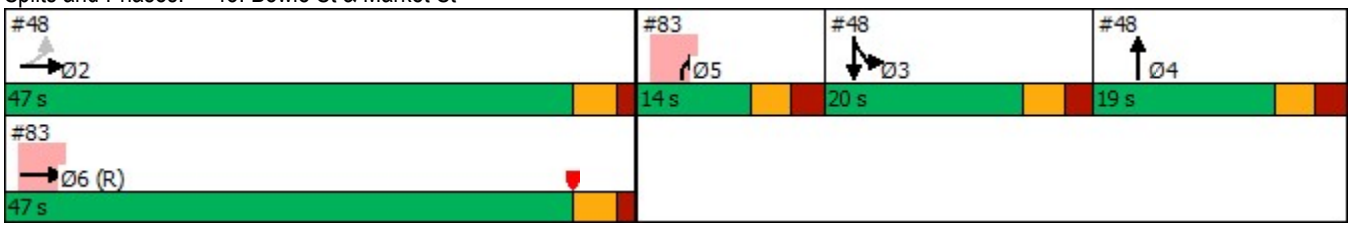
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	133	425	12	0	0	0	0	21	20	208	64	0
Future Volume (vph)	133	425	12	0	0	0	0	21	20	208	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.997						0.934				
Flt Protected		0.988								0.950	0.975	
Satd. Flow (prot)	0	5009	0	0	0	0	0	1740	0	1681	1725	0
Flt Permitted		0.988								0.950	0.975	
Satd. Flow (perm)	0	5009	0	0	0	0	0	1740	0	1681	1725	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		4										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1040			168			284			287	
Travel Time (s)		23.6			3.8			6.5			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	171	545	15	0	0	0	0	27	26	267	82	0
Shared Lane Traffic (%)										33%		
Lane Group Flow (vph)	0	731	0	0	0	0	0	53	0	179	170	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Split	NA	
Protected Phases		2						4		3	3	
Permitted Phases	2											
Detector Phase	2	2						4		3	3	
Switch Phase												

Lane Group	Ø5	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Growth Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	5	6
Permitted Phases		
Detector Phase		
Switch Phase		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	10.0	10.0						3.0		5.0	5.0	
Minimum Split (s)	14.7	14.7						8.5		10.3	10.3	
Total Split (s)	47.0	47.0						19.0		20.0	20.0	
Total Split (%)	47.0%	47.0%						19.0%		20.0%	20.0%	
Maximum Green (s)	42.3	42.3						13.5		14.7	14.7	
Yellow Time (s)	3.2	3.2						3.0		3.2	3.2	
All-Red Time (s)	1.5	1.5						2.5		2.1	2.1	
Lost Time Adjust (s)		-0.7						0.0		-1.3	-1.5	
Total Lost Time (s)		4.0						5.5		4.0	3.8	
Lead/Lag										Lag	Lag	
Lead-Lag Optimize?										Yes	Yes	
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	Min	Min						None		None	None	
Walk Time (s)	7.0	7.0						4.0				
Flash Dont Walk (s)	27.0	27.0						13.0				
Pedestrian Calls (#/hr)	0	0						0				
Act Effct Green (s)		28.7						6.5		14.0	14.2	
Actuated g/C Ratio		0.29						0.06		0.14	0.14	
v/c Ratio		0.51						0.47		0.76	0.69	
Control Delay		25.3						57.6		47.6	41.0	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		25.3						57.6		47.6	41.0	
LOS		C						E		D	D	
Approach Delay		25.3						57.6			44.4	
Approach LOS		C						E			D	

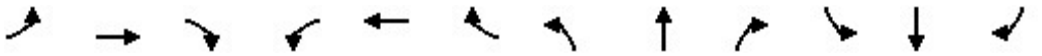
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 10 (10%), Referenced to phase 6:EBT, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 32.7		Intersection LOS: C	
Intersection Capacity Utilization 35.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 48: Bowie St & Market St



Lane Group	Ø5	Ø6
Minimum Initial (s)	1.5	10.0
Minimum Split (s)	7.0	14.7
Total Split (s)	14.0	47.0
Total Split (%)	14%	47%
Maximum Green (s)	8.5	42.3
Yellow Time (s)	3.0	3.2
All-Red Time (s)	2.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	1.0	1.0
Recall Mode	Max	C-Min
Walk Time (s)		7.0
Flash Dont Walk (s)		27.0
Pedestrian Calls (#/hr)		0
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		

Intersection Summary



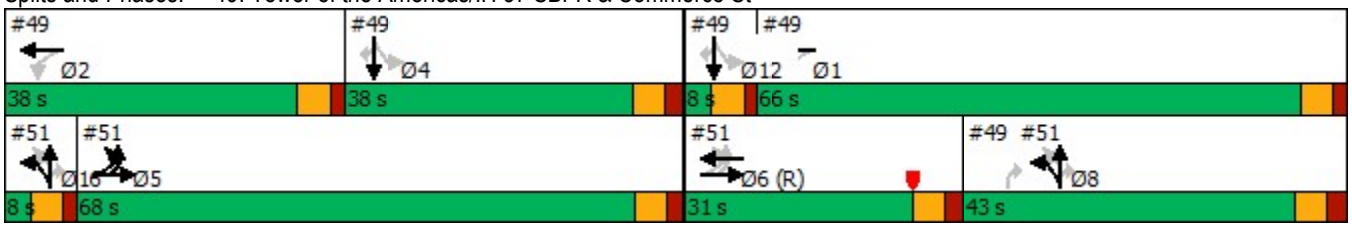
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	89	983	0	0	0	137	104	35	615
Future Volume (vph)	0	0	0	89	983	0	0	0	137	104	35	615
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt									0.865			0.850
Flt Protected					0.996						0.964	
Satd. Flow (prot)	0	0	0	0	3525	0	0	0	1611	0	3412	1583
Flt Permitted					0.996						0.964	
Satd. Flow (perm)	0	0	0	0	3525	0	0	0	1611	0	3412	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)												139
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		321			283			336			353	
Travel Time (s)		7.3			6.4			7.6			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%
Adj. Flow (vph)	0	0	0	113	1250	0	0	0	174	132	45	782
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1363	0	0	0	174	0	177	782
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2				1	1	2	1
Detector Template				Left	Thru				Right	Left	Thru	Right
Leading Detector (ft)				20	100				20	20	100	20
Trailing Detector (ft)				0	0				0	0	0	0
Detector 1 Position(ft)				0	0				0	0	0	0
Detector 1 Size(ft)				20	6				20	20	6	20
Detector 1 Type				Cl+Ex	Cl+Ex				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0				0.0	0.0	0.0	0.0
Detector 1 Queue (s)				0.0	0.0				0.0	0.0	0.0	0.0
Detector 1 Delay (s)				0.0	0.0				0.0	0.0	0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA				Perm	Perm	NA	Perm
Protected Phases					1 2						4 12	
Permitted Phases				1 2					8	4 12		4 12
Detector Phase				1 2	1 2				8	4 12	4 12	4 12
Switch Phase												

Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø12	Ø16
Lane Configurations							
Traffic Volume (vph)							
Future Volume (vph)							
Ideal Flow (vphpl)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Growth Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	12	16
Permitted Phases							
Detector Phase							
Switch Phase							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)									3.0			
Minimum Split (s)									38.0			
Total Split (s)									43.0			
Total Split (%)									28.7%			
Maximum Green (s)									37.0			
Yellow Time (s)									3.6			
All-Red Time (s)									2.4			
Lost Time Adjust (s)									-1.3			
Total Lost Time (s)									4.7			
Lead/Lag									Lag			
Lead-Lag Optimize?									Yes			
Vehicle Extension (s)									3.0			
Recall Mode									None			
Walk Time (s)									7.0			
Flash Dont Walk (s)									0.0			
Pedestrian Calls (#/hr)									0			
Act Effct Green (s)					82.9				37.5		59.1	59.1
Actuated g/C Ratio					0.55				0.25		0.39	0.39
v/c Ratio					0.70				0.43		0.13	1.11
Control Delay					5.0				50.9		30.9	101.5
Queue Delay					0.3				3.0		0.0	0.0
Total Delay					5.3				53.9		30.9	101.5
LOS					A				D		C	F
Approach Delay					5.3			53.9			88.5	
Approach LOS					A			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 6:EBWB, Start of Yellow			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay: 40.6		Intersection LOS: D	
Intersection Capacity Utilization 86.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 49: Tower of the Americas/IH 37 SBFR & Commerce St



Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø12	Ø16
Minimum Initial (s)	3.0	10.0	3.0	3.0	6.0	1.0	1.0
Minimum Split (s)	37.3	38.0	38.0	23.7	23.7	6.1	7.4
Total Split (s)	66.0	38.0	38.0	68.0	31.0	8.0	8.0
Total Split (%)	44%	25%	25%	45%	21%	5%	5%
Maximum Green (s)	60.7	32.7	32.0	62.3	25.3	2.9	2.9
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.7	1.7	2.4	2.1	2.1	1.5	1.5
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	None	None	C-Min	Max	Max
Walk Time (s)		7.0	7.0		0.0		
Flash Dont Walk (s)		16.0	3.0		0.0		
Pedestrian Calls (#/hr)		0	0		0		
Act Effct Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							

Intersection Summary

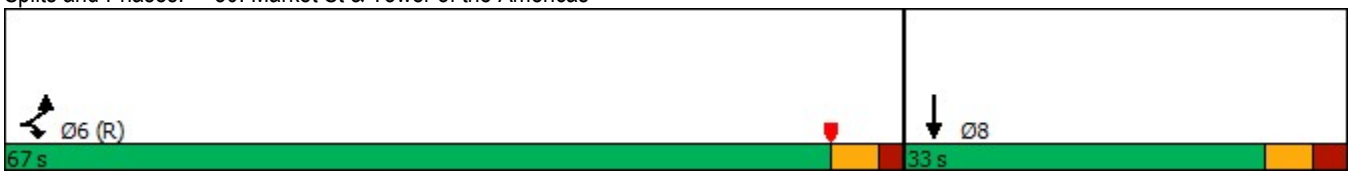


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	138	506	0	0	113	0
Future Volume (vph)	138	506	0	0	113	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1770	2787	0	0	3539	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	2787	0	0	3539	0
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	646			629	336	
Travel Time (s)	14.7			14.3	7.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	177	649	0	0	145	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	177	649	0	0	145	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1			2	
Detector Template	Left	Right			Thru	
Leading Detector (ft)	20	20			100	
Trailing Detector (ft)	0	0			0	
Detector 1 Position(ft)	0	0			0	
Detector 1 Size(ft)	20	20			6	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	
Detector 2 Position(ft)					94	
Detector 2 Size(ft)					6	
Detector 2 Type					Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)					0.0	
Turn Type	Prot	Prot			NA	
Protected Phases	6	6			8	
Permitted Phases						
Detector Phase	6	6			8	
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	10.0	10.0			6.0	
Minimum Split (s)	15.6	15.6			27.3	
Total Split (s)	67.0	67.0			33.0	
Total Split (%)	67.0%	67.0%			33.0%	
Maximum Green (s)	61.4	61.4			26.7	
Yellow Time (s)	3.6	3.6			3.6	
All-Red Time (s)	2.0	2.0			2.7	
Lost Time Adjust (s)	-1.6	-1.6			-2.3	
Total Lost Time (s)	4.0	4.0			4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0	1.0			1.0	
Recall Mode	C-Min	C-Min			None	
Walk Time (s)					7.0	
Flash Dont Walk (s)					14.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	81.9	81.9			10.1	
Actuated g/C Ratio	0.82	0.82			0.10	
v/c Ratio	0.12	0.28			0.41	
Control Delay	2.2	2.6			45.3	
Queue Delay	0.0	0.0			0.0	
Total Delay	2.2	2.6			45.3	
LOS	A	A			D	
Approach Delay	2.5				45.3	
Approach LOS	A				D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 6:EBL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 8.9		Intersection LOS: A	
Intersection Capacity Utilization 32.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 50: Market St & Tower of the Americas



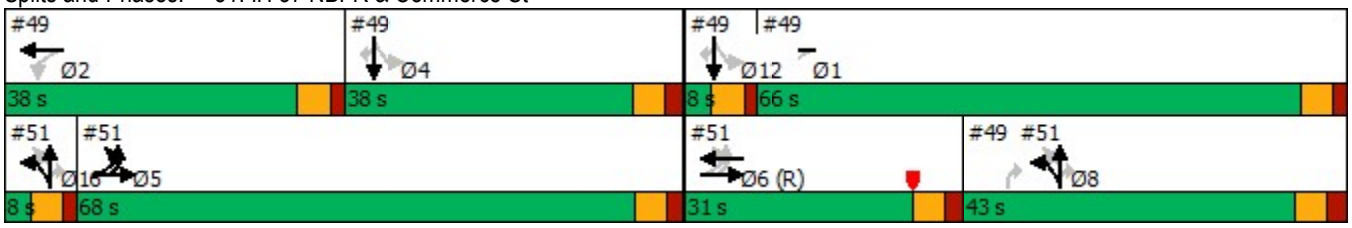
Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR	Ø1	Ø2
Lane Configurations												
Traffic Volume (vph)	46	22	167	367	107	36	604	50	230	184		
Future Volume (vph)	46	22	167	367	107	36	604	50	230	184		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0			86			0		0		
Storage Lanes		1			1			2		1		
Taper Length (ft)		25						25				
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	0.95	0.97	1.00	1.00	1.00		
Frt					0.850					0.850		
Flt Protected		0.950					0.950		0.991			
Satd. Flow (prot)	0	1770	1863	3539	1583	0	3433	0	1846	1583		
Flt Permitted		0.191					0.950		0.991			
Satd. Flow (perm)	0	356	1863	3539	1583	0	3433	0	1846	1583		
Right Turn on Red						Yes				Yes		
Satd. Flow (RTOR)					141					234		
Link Speed (mph)			30	30					30			
Link Distance (ft)			283	712					755			
Travel Time (s)			6.4	16.2					17.2			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%		
Adj. Flow (vph)	59	28	212	467	136	46	768	64	293	234		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	212	467	182	0	768	0	357	234		
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Left	Right	Right	Left	Left	Left	Right		
Median Width(ft)			12	12					24			
Link Offset(ft)			0	0					0			
Crosswalk Width(ft)			16	16					16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15	15			9	9	15	15		9		
Number of Detectors	1	1	2	2	1		1	1	2	1		
Detector Template	Left	Left	Thru	Thru	Right		Left	Left	Thru			
Leading Detector (ft)	20	20	100	100	20		20	20	100	0		
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0		
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0		
Detector 1 Size(ft)	20	20	6	6	20		20	20	6	0		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Detector 2 Position(ft)			94	94					94			
Detector 2 Size(ft)			6	6					6			
Detector 2 Type			Cl+Ex	Cl+Ex					Cl+Ex			
Detector 2 Channel												
Detector 2 Extend (s)			0.0	0.0					0.0			
Turn Type	D.P+P	D.P+P	NA	NA	Perm		Split	Perm	NA	Perm		
Protected Phases	5	5	5 6	6			8 16		8 16		1	2

Lane Group	Ø4	Ø8	Ø12	Ø16
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Growth Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	4	8	12	16

Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR	Ø1	Ø2
Permitted Phases	6	6			6			8 16		8 16		
Detector Phase	5	5	5 6	6	6		8 16	8 16	8 16	8 16		
Switch Phase												
Minimum Initial (s)	3.0	3.0		6.0	6.0						3.0	10.0
Minimum Split (s)	23.7	23.7		23.7	23.7						37.3	38.0
Total Split (s)	68.0	68.0		31.0	31.0						66.0	38.0
Total Split (%)	45.3%	45.3%		20.7%	20.7%						44%	25%
Maximum Green (s)	62.3	62.3		25.3	25.3						60.7	32.7
Yellow Time (s)	3.6	3.6		3.6	3.6						3.6	3.6
All-Red Time (s)	2.1	2.1		2.1	2.1						1.7	1.7
Lost Time Adjust (s)		-1.7		-1.7	-1.7							
Total Lost Time (s)		4.0		4.0	4.0							
Lead/Lag	Lag	Lag		Lead	Lead						Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes						Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0						3.0	3.0
Recall Mode	None	None		C-Min	C-Min						None	Min
Walk Time (s)				0.0	0.0							7.0
Flash Dont Walk (s)				0.0	0.0							16.0
Pedestrian Calls (#/hr)				0	0							0
Act Effct Green (s)		89.8	93.8	25.8	25.8		48.2		48.2	46.2		
Actuated g/C Ratio		0.60	0.63	0.17	0.17		0.32		0.32	0.31		
v/c Ratio		0.11	0.18	0.77	0.47		0.70		0.60	0.36		
Control Delay		21.3	23.2	68.3	18.8		48.8		48.3	6.1		
Queue Delay		0.0	1.8	3.6	0.0		0.0		0.0	0.0		
Total Delay		21.3	25.0	71.9	18.8		48.8		48.3	6.1		
LOS		C	C	E	B		D		D	A		
Approach Delay			23.9	57.0					41.3			
Approach LOS			C	E					D			

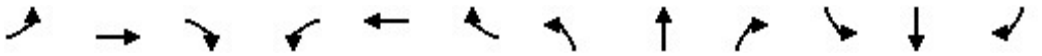
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 6:EBWB, Start of Yellow			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay: 43.5		Intersection LOS: D	
Intersection Capacity Utilization 46.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 51: IH 37 NBFR & Commerce St



Lane Group	Ø4	Ø8	Ø12	Ø16
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	3.0	3.0	1.0	1.0
Minimum Split (s)	38.0	38.0	6.1	7.4
Total Split (s)	38.0	43.0	8.0	8.0
Total Split (%)	25%	29%	5%	5%
Maximum Green (s)	32.0	37.0	2.9	2.9
Yellow Time (s)	3.6	3.6	3.6	3.6
All-Red Time (s)	2.4	2.4	1.5	1.5
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max
Walk Time (s)	7.0	7.0		
Flash Dont Walk (s)	3.0	0.0		
Pedestrian Calls (#/hr)	0	0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary

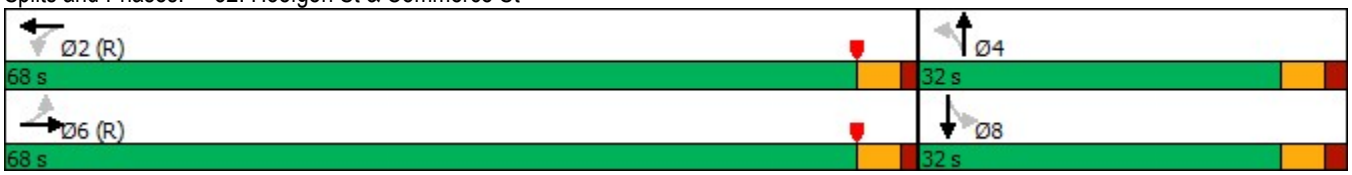


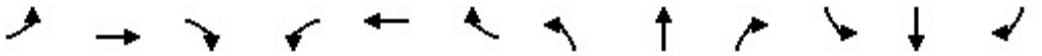
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	283	8	5	425	3	31	2	4	1	1	46
Future Volume (vph)	13	283	8	5	425	3	31	2	4	1	1	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.999			0.906			0.869	
Flt Protected		0.998			0.999		0.950				0.999	
Satd. Flow (prot)	0	3518	0	0	3532	0	1770	1688	0	0	1617	0
Flt Permitted		0.926			0.952		0.712				0.995	
Satd. Flow (perm)	0	3264	0	0	3366	0	1326	1688	0	0	1611	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			1			5			59	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		712			691			421			307	
Travel Time (s)		16.2			15.7			9.6			7.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%
Adj. Flow (vph)	17	360	10	6	540	4	39	3	5	1	1	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	387	0	0	550	0	39	8	0	0	61	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	0	100		0	100		20	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	0	6		0	6		20	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	45.0	45.0		45.0	45.0		25.0	25.0		25.0	25.0	
Total Split (s)	68.0	68.0		68.0	68.0		32.0	32.0		32.0	32.0	
Total Split (%)	68.0%	68.0%		68.0%	68.0%		32.0%	32.0%		32.0%	32.0%	
Maximum Green (s)	63.4	63.4		63.4	63.4		27.0	27.0		27.0	27.0	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.4	1.4		1.4	1.4		1.8	1.8		1.8	1.8	
Lost Time Adjust (s)		-0.6			-0.6		-1.0	-1.0			-1.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		86.9			86.9		8.1	8.1			8.1	
Actuated g/C Ratio		0.87			0.87		0.08	0.08			0.08	
v/c Ratio		0.14			0.19		0.36	0.06			0.33	
Control Delay		1.5			1.6		52.9	30.7			17.3	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		1.5			1.6		52.9	30.7			17.3	
LOS		A			A		D	C			B	
Approach Delay		1.5			1.6			49.1			17.3	
Approach LOS		A			A			D			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 10 (10%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay: 4.6		Intersection LOS: A	
Intersection Capacity Utilization 36.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 52: Hoefgen St & Commerce St





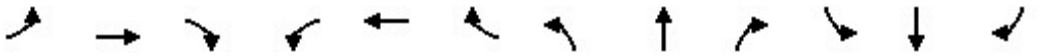
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	229	24	43	352	57	67	253	63	25	125	14
Future Volume (vph)	35	229	24	43	352	57	67	253	63	25	125	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	0		150
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.987			0.981				0.850		0.987	
Flt Protected		0.994			0.995			0.990			0.992	
Satd. Flow (prot)	0	3472	0	0	3455	0	0	1844	1583	0	3465	0
Flt Permitted		0.855			0.889			0.885			0.860	
Satd. Flow (perm)	0	2987	0	0	3087	0	0	1649	1583	0	3004	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			30				80		16	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		360			236			259			1425	
Travel Time (s)		8.2			5.4			5.9			32.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%
Adj. Flow (vph)	45	291	31	55	448	72	85	322	80	32	159	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	367	0	0	575	0	0	407	80	0	209	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	0	100		0	100		0	100	0	0	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	0	6		0	6		0	6	0	0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		D.P+P	NA	Perm	Perm	NA	
Protected Phases		4			8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			6		2	6		
Detector Phase	4	4		8	8		5	2	2	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		3.0	10.0	10.0	10.0	10.0	
Minimum Split (s)	24.7	24.7		24.7	24.7		7.0	24.9	24.9	19.9	19.9	
Total Split (s)	26.0	26.0		26.0	26.0		14.0	34.0	34.0	20.0	20.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		23.3%	56.7%	56.7%	33.3%	33.3%	
Maximum Green (s)	21.3	21.3		21.3	21.3		10.0	29.1	29.1	15.1	15.1	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.0	3.6	3.6	3.6	3.6	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.3	1.3	1.3	1.3	
Lost Time Adjust (s)		-0.7			-0.7			-0.9	0.0		-0.9	
Total Lost Time (s)		4.0			4.0			4.0	4.9		4.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	2.0	2.0	2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	Min	Min	Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0	7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0			13.0	13.0	8.0	8.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0	0	0	
Act Effct Green (s)		31.6			31.6			20.4	19.5		20.4	
Actuated g/C Ratio		0.53			0.53			0.34	0.32		0.34	
v/c Ratio		0.23			0.35			0.73	0.14		0.20	
Control Delay		9.1			9.9			24.3	3.6		11.5	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		9.1			9.9			24.3	3.6		11.5	
LOS		A			A			C	A		B	
Approach Delay		9.1			9.9			20.9			11.5	
Approach LOS		A			A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 47 (78%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 13.2		Intersection LOS: B	
Intersection Capacity Utilization 66.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 53: Cherry St & Commerce St





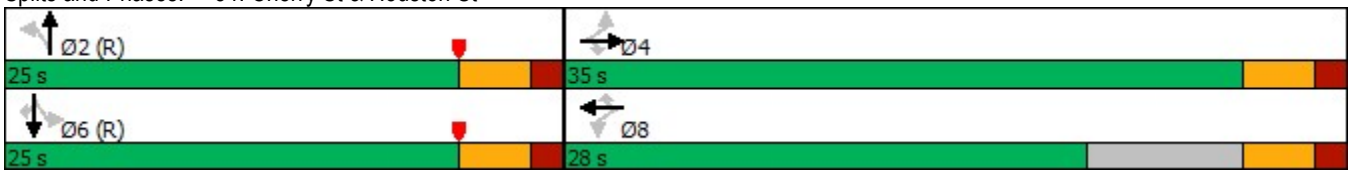
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	89	42	22	100	24	45	227	33	8	156	3
Future Volume (vph)	4	89	42	22	100	24	45	227	33	8	156	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		50	0		150	0		0
Storage Lanes	0		1	0		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.96		0.99			1.00	0.93
Frt			0.850			0.850		0.984				0.850
Flt Protected		0.998			0.991			0.993			0.998	
Satd. Flow (prot)	0	1859	1583	0	1846	1583	0	3431	0	0	1859	1583
Flt Permitted		0.984			0.921			0.888			0.980	
Satd. Flow (perm)	0	1831	1518	0	1708	1518	0	3052	0	0	1823	1470
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			56			32		24				31
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		480			939			1425			459	
Travel Time (s)		10.9			21.3			32.4			10.4	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	5	119	56	29	134	32	60	303	44	11	209	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	56	0	163	32	0	407	0	0	220	4
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	0	100	0	0	100	20	0	100		0	100	0
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	0	6	0	0	6	20	0	6		0	6	0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

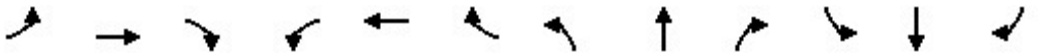
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		6
Detector Phase	4	4	4	8	8	8	2	2		6	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	22.7	22.7	22.7	22.7	22.7	22.7	21.7	21.7		21.7	21.7	21.7
Total Split (s)	35.0	35.0	35.0	28.0	28.0	28.0	25.0	25.0		25.0	25.0	25.0
Total Split (%)	58.3%	58.3%	58.3%	46.7%	46.7%	46.7%	41.7%	41.7%		41.7%	41.7%	41.7%
Maximum Green (s)	30.3	30.3	30.3	23.3	23.3	23.3	20.3	20.3		20.3	20.3	20.3
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2		3.2	3.2	3.2
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	1.5
Lost Time Adjust (s)		-0.7	0.0		-0.7	-0.7		-0.7			-0.7	0.0
Total Lost Time (s)		4.0	4.7		4.0	4.0		4.0			4.0	4.7
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	None	None	None	None	None	C-Min	C-Min		C-Min	C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	10.0	10.0		10.0	10.0	10.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	0
Act Effct Green (s)		11.9	11.2		11.9	11.9		43.8			43.8	43.2
Actuated g/C Ratio		0.20	0.19		0.20	0.20		0.73			0.73	0.72
v/c Ratio		0.34	0.17		0.48	0.10		0.18			0.17	0.00
Control Delay		22.9	7.6		18.9	2.8		6.3			4.3	0.0
Queue Delay		0.0	0.0		0.0	0.0		0.0			0.0	0.0
Total Delay		22.9	7.6		18.9	2.8		6.3			4.3	0.0
LOS		C	A		B	A		A			A	A
Approach Delay		18.2			16.3			6.3			4.2	
Approach LOS		B			B			A			A	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 29 (48%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.48
Intersection Signal Delay: 9.9 Intersection LOS: A
Intersection Capacity Utilization 53.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 54: Cherry St & Houston St



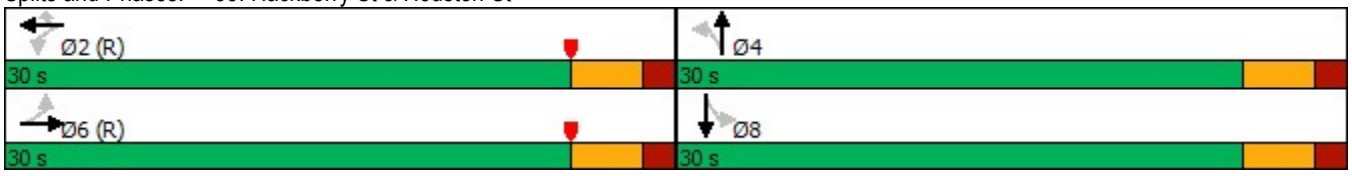


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	109	6	27	120	14	16	194	40	25	89	7
Future Volume (vph)	10	109	6	27	120	14	16	194	40	25	89	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		50	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor	0.98	1.00			1.00	0.96		0.99			0.99	
Frt		0.992				0.850		0.976			0.992	
Flt Protected	0.950				0.991			0.997			0.990	
Satd. Flow (prot)	1770	1844	0	0	1846	1583	0	3420	0	0	3462	0
Flt Permitted	0.634				0.942			0.927			0.831	
Satd. Flow (perm)	1153	1844	0	0	1746	1515	0	3172	0	0	2894	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		939			955			521			463	
Travel Time (s)		21.3			21.7			11.8			10.5	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	13	146	8	36	160	19	21	259	53	33	119	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	154	0	0	196	19	0	333	0	0	161	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	0	100		0	100	0	0	100		0	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	0	6		0	6	0	0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2		2	4			8		
Detector Phase	6	6		2	2	2	4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	6.0	6.0		6.0	6.0	
Minimum Split (s)	21.7	21.7		21.7	21.7	21.7	21.7	21.7		21.7	21.7	
Total Split (s)	30.0	30.0		30.0	30.0	30.0	30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%	50.0%	50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	25.3	25.3		25.3	25.3	25.3	25.3	25.3		25.3	25.3	
Yellow Time (s)	3.2	3.2		3.2	3.2	3.2	3.2	3.2		3.2	3.2	
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-0.7	-0.7			-0.7	0.0		-0.7			-0.7	
Total Lost Time (s)	4.0	4.0			4.0	4.7		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0		0	0	
Act Effct Green (s)	41.5	41.5			41.5	40.8		10.5			10.5	
Actuated g/C Ratio	0.69	0.69			0.69	0.68		0.18			0.18	
v/c Ratio	0.02	0.12			0.16	0.02		0.60			0.32	
Control Delay	9.6	11.4			6.5	5.8		27.0			22.4	
Queue Delay	0.0	0.0			0.0	0.0		0.0			0.0	
Total Delay	9.6	11.4			6.5	5.8		27.0			22.4	
LOS	A	B			A	A		C			C	
Approach Delay		11.3			6.4			27.0			22.4	
Approach LOS		B			A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 55 (92%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 18.1		Intersection LOS: B	
Intersection Capacity Utilization 64.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 55: Hackberry St & Houston St



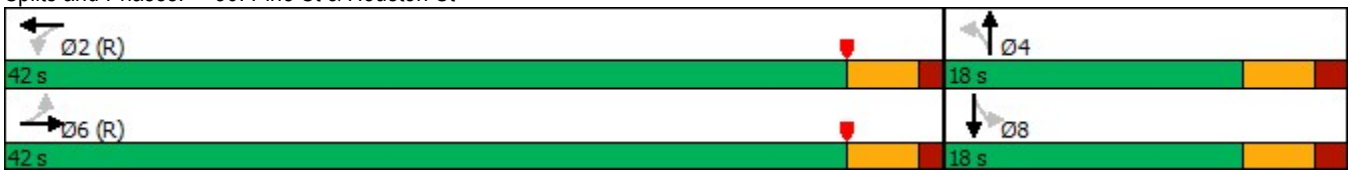
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	145	9	4	150	25	2	48	9	17	40	8
Future Volume (vph)	8	145	9	4	150	25	2	48	9	17	40	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.96	1.00		0.96	0.99			0.98			0.97	
Frt		0.991			0.979			0.979			0.983	
Flt Protected	0.950			0.950				0.998			0.987	
Satd. Flow (prot)	1770	1838	0	1770	1804	0	0	1796	0	0	1787	0
Flt Permitted	0.613			0.629				0.988			0.928	
Satd. Flow (perm)	1095	1838	0	1122	1804	0	0	1774	0	0	1653	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			27			12			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		955			2799			472			467	
Travel Time (s)		21.7			63.6			10.7			10.6	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	11	194	12	5	201	33	3	64	12	23	53	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	206	0	5	234	0	0	79	0	0	87	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

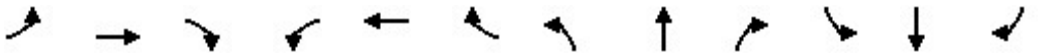
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	20.4	20.4		20.4	20.4		17.7	17.7		17.7	17.7	
Total Split (s)	42.0	42.0		42.0	42.0		18.0	18.0		18.0	18.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	37.6	37.6		37.6	37.6		13.3	13.3		13.3	13.3	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-0.4	-0.4		-0.4	-0.4			-0.4			-0.4	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.3			4.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	9.0	9.0		9.0	9.0		6.0	6.0		6.0	6.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	47.2	47.2		47.2	47.2			7.5			7.5	
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.12			0.12	
v/c Ratio	0.01	0.14		0.01	0.16			0.34			0.40	
Control Delay	4.8	6.3		2.6	2.5			24.8			27.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	4.8	6.3		2.6	2.5			24.8			27.1	
LOS	A	A		A	A			C			C	
Approach Delay		6.3			2.5			24.8			27.1	
Approach LOS		A			A			C			C	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 34 (57%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.40
Intersection Signal Delay: 10.1 Intersection LOS: B
Intersection Capacity Utilization 31.6% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 56: Pine St & Houston St



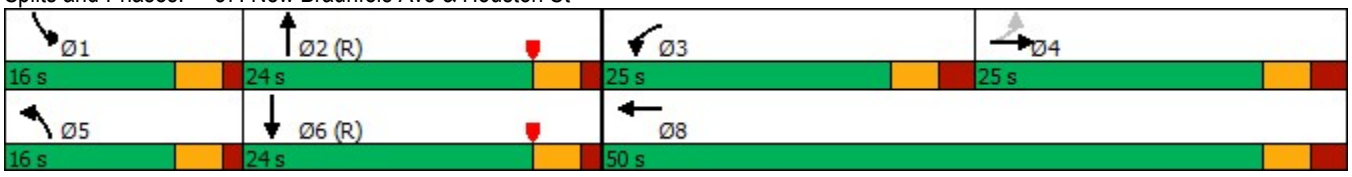


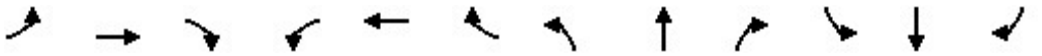
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	82	26	35	102	62	34	477	36	18	299	56
Future Volume (vph)	44	82	26	35	102	62	34	477	36	18	299	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	226		0	208		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.964			0.943			0.990			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1796	0	1770	1757	0	1770	3504	0	1770	3454	0
Flt Permitted	0.621			0.950			0.950			0.950		
Satd. Flow (perm)	1157	1796	0	1770	1757	0	1770	3504	0	1770	3454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			50			8			22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2799			1494			922			669	
Travel Time (s)		63.6			34.0			21.0			15.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	59	110	35	47	136	83	45	638	48	24	400	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	59	145	0	47	219	0	45	686	0	24	475	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases		4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4											
Detector Phase	4	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		3.0	10.0		3.0	10.0	
Minimum Split (s)	10.7	10.7		8.7	10.7		7.6	23.6		7.6	23.6	
Total Split (s)	25.0	25.0		25.0	50.0		16.0	24.0		16.0	24.0	
Total Split (%)	27.8%	27.8%		27.8%	55.6%		17.8%	26.7%		17.8%	26.7%	
Maximum Green (s)	19.3	19.3		19.3	44.3		11.4	19.4		11.4	19.4	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	2.5	2.5		2.5	2.5		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-1.7	-1.7		-1.7	-1.7		-0.6	-0.6		-0.6	-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		0.5	1.0		0.5	2.0		0.5	2.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	3.0	3.0			3.0			7.0			7.0	
Flash Dont Walk (s)	2.0	2.0			2.0			12.0			12.0	
Pedestrian Calls (#/hr)	0	0			0			0			0	
Act Effct Green (s)	12.2	12.2		7.1	19.6		5.9	58.3		5.0	55.7	
Actuated g/C Ratio	0.14	0.14		0.08	0.22		0.07	0.65		0.06	0.62	
v/c Ratio	0.38	0.56		0.34	0.52		0.39	0.30		0.25	0.22	
Control Delay	41.3	40.0		43.5	29.3		49.2	10.0		46.3	10.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	41.3	40.0		43.5	29.3		49.2	10.0		46.3	10.4	
LOS	D	D		D	C		D	A		D	B	
Approach Delay		40.4			31.8			12.4			12.1	
Approach LOS		D			C			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 55 (61%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 18.7		Intersection LOS: B	
Intersection Capacity Utilization 48.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 57: New Braunfels Ave & Houston St



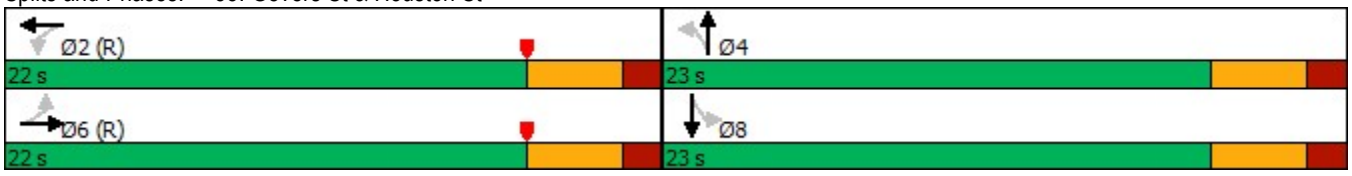


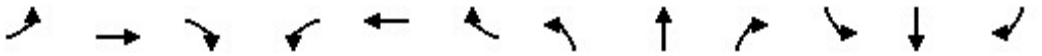
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	127	4	10	163	8	18	43	11	6	36	6
Future Volume (vph)	4	127	4	10	163	8	18	43	11	6	36	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	120		0	122		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	1.00		0.97	1.00		0.97	0.99		0.97	0.99	
Frt		0.996			0.993			0.969			0.979	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1852	0	1770	1844	0	1770	1784	0	1770	1809	0
Flt Permitted	0.616			0.647			0.889			0.889		
Satd. Flow (perm)	1114	1852	0	1168	1844	0	1599	1784	0	1600	1809	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			7			15			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1494			1426			502			301	
Travel Time (s)		34.0			32.4			11.4			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	5	170	5	13	218	11	24	57	15	8	48	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	175	0	13	229	0	24	72	0	8	56	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		22.6	22.6		22.6	22.6	
Total Split (s)	22.0	22.0		22.0	22.0		23.0	23.0		23.0	23.0	
Total Split (%)	48.9%	48.9%		48.9%	48.9%		51.1%	51.1%		51.1%	51.1%	
Maximum Green (s)	17.5	17.5		17.5	17.5		18.4	18.4		18.4	18.4	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3		1.3	1.3		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-0.5	-0.5		-0.5	-0.5		-0.6	-0.6		-0.6	-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	36.0	36.0		36.0	36.0		6.9	6.9		6.9	6.9	
Actuated g/C Ratio	0.80	0.80		0.80	0.80		0.15	0.15		0.15	0.15	
v/c Ratio	0.01	0.12		0.01	0.16		0.10	0.25		0.03	0.20	
Control Delay	1.6	1.5		1.6	1.6		17.1	16.4		16.3	16.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	1.6	1.5		1.6	1.6		17.1	16.4		16.3	16.5	
LOS	A	A		A	A		B	B		B	B	
Approach Delay		1.5			1.6			16.6			16.5	
Approach LOS		A			A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 35 (78%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.25			
Intersection Signal Delay: 5.7		Intersection LOS: A	
Intersection Capacity Utilization 33.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 58: Gevers St & Houston St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	113	14	14	161	105	5	361	19	65	369	27
Future Volume (vph)	39	113	14	14	161	105	5	361	19	65	369	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	1.00		0.98	0.99		0.98	1.00		0.98	1.00	
Frt		0.983			0.941			0.993			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1825	0	1770	1731	0	1770	3505	0	1770	3491	0
Flt Permitted	0.522			0.650			0.392			0.409		
Satd. Flow (perm)	961	1825	0	1191	1731	0	718	3505	0	749	3491	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			98			13			18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1426			1545			543			299	
Travel Time (s)		32.4			35.1			12.3			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	52	151	19	19	215	140	7	483	25	87	493	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	170	0	19	355	0	7	508	0	87	529	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

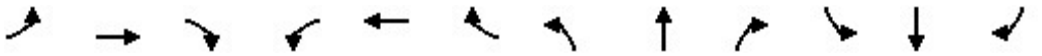
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.7	14.7		14.7	14.7		14.8	14.8		14.8	14.8	
Total Split (s)	25.0	25.0		25.0	25.0		20.0	20.0		20.0	20.0	
Total Split (%)	55.6%	55.6%		55.6%	55.6%		44.4%	44.4%		44.4%	44.4%	
Maximum Green (s)	20.3	20.3		20.3	20.3		15.2	15.2		15.2	15.2	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.2	1.2		1.2	1.2	
Lost Time Adjust (s)	-0.7	-0.7		-0.7	-0.7		-0.8	-0.8		-0.8	-0.8	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	23.9	23.9		23.9	23.9		13.1	13.1		13.1	13.1	
Actuated g/C Ratio	0.53	0.53		0.53	0.53		0.29	0.29		0.29	0.29	
v/c Ratio	0.10	0.17		0.03	0.37		0.03	0.49		0.40	0.51	
Control Delay	9.8	8.6		9.3	8.9		10.0	14.1		17.7	14.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	9.8	8.6		9.3	8.9		10.0	14.1		17.7	14.2	
LOS	A	A		A	A		A	B		B	B	
Approach Delay		8.9			8.9			14.0			14.7	
Approach LOS		A			A			B			B	

Intersection Summary

Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 5 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.51
Intersection Signal Delay: 12.5 Intersection LOS: B
Intersection Capacity Utilization 64.5% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 59: Walters St & Houston St





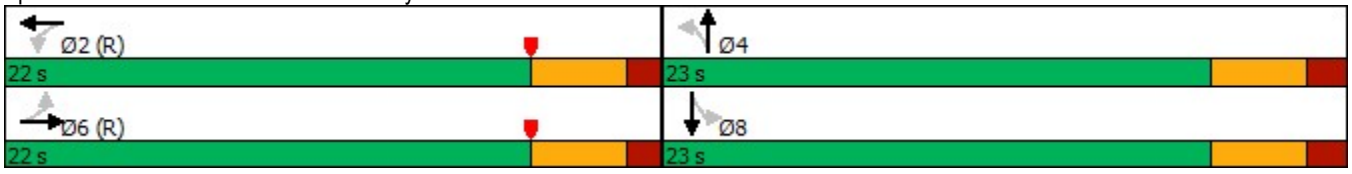
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	155	17	11	218	18	19	41	25	14	32	13
Future Volume (vph)	17	155	17	11	218	18	19	41	25	14	32	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	125		0	125		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	0.99		0.97	1.00		0.97	0.98		0.97	0.98	
Frt		0.985			0.989			0.944			0.957	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1824	0	1770	1834	0	1770	1721	0	1770	1754	0
Flt Permitted	0.569			0.615			0.870			0.870		
Satd. Flow (perm)	1034	1824	0	1113	1834	0	1565	1721	0	1567	1754	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			11			33			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1545			1332			494			300	
Travel Time (s)		35.1			30.3			11.2			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	23	207	23	15	291	24	25	55	33	19	43	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	230	0	15	315	0	25	88	0	19	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

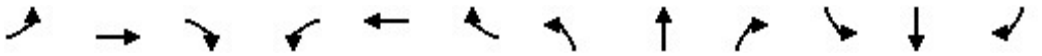
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	21.4	21.4		21.4	21.4		22.6	22.6		22.6	22.6	
Total Split (s)	22.0	22.0		22.0	22.0		23.0	23.0		23.0	23.0	
Total Split (%)	48.9%	48.9%		48.9%	48.9%		51.1%	51.1%		51.1%	51.1%	
Maximum Green (s)	17.6	17.6		17.6	17.6		18.4	18.4		18.4	18.4	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-0.4	-0.4		-0.4	-0.4		-0.6	-0.6		-0.6	-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	35.9	35.9		35.9	35.9		7.0	7.0		7.0	7.0	
Actuated g/C Ratio	0.80	0.80		0.80	0.80		0.16	0.16		0.16	0.16	
v/c Ratio	0.03	0.16		0.02	0.22		0.10	0.30		0.08	0.21	
Control Delay	2.6	2.3		2.9	3.0		17.1	14.6		16.7	14.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	2.6	2.3		2.9	3.0		17.1	14.6		16.7	14.8	
LOS	A	A		A	A		B	B		B	B	
Approach Delay		2.4			3.0			15.1			15.3	
Approach LOS		A			A			B			B	

Intersection Summary

Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 5 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.30
Intersection Signal Delay: 5.8 Intersection LOS: A
Intersection Capacity Utilization 36.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 60: Mel Waiters Way/Rio Grande & Houston St



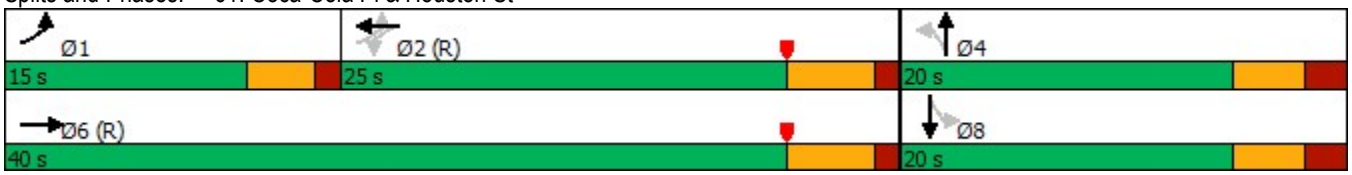


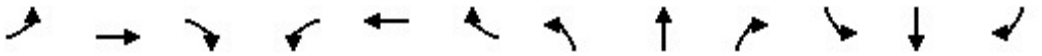
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	230	17	90	295	4	14	4	133	4	4	4
Future Volume (vph)	4	230	17	90	295	4	14	4	133	4	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		0	250		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.998				0.850		0.955	
Flt Protected	0.950			0.950				0.962			0.984	
Satd. Flow (prot)	1770	3504	0	1770	3532	0	0	1792	1583	0	1750	0
Flt Permitted	0.517			0.552								
Satd. Flow (perm)	963	3504	0	1028	3532	0	0	1863	1583	0	1779	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23			2				209		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1094			1140			730			346	
Travel Time (s)		24.9			25.9			16.6			7.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	5	308	23	120	394	5	19	5	178	5	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	331	0	120	399	0	0	24	178	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA		Perm	NA		Perm	NA	Free	Perm	NA	
Protected Phases	1	6			2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			2			4		Free	8		
Detector Phase	1	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	7.2	27.1		15.1	15.1		11.2	11.2		11.2	11.2	
Total Split (s)	15.0	40.0		25.0	25.0		20.0	20.0		20.0	20.0	
Total Split (%)	25.0%	66.7%		41.7%	41.7%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	10.8	34.9		19.9	19.9		14.8	14.8		14.8	14.8	
Yellow Time (s)	3.0	3.9		3.9	3.9		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-0.2	-1.1		-1.1	-1.1			-1.2			-1.2	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	0.5	1.5		1.5	1.5		1.0	1.0		1.0	1.0	
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)		7.0					7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0					17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)		0					0	0		0	0	
Act Effct Green (s)	52.9	56.9		55.4	55.4			7.2	60.0		7.2	
Actuated g/C Ratio	0.88	0.95		0.92	0.92			0.12	1.00		0.12	
v/c Ratio	0.01	0.10		0.13	0.12			0.11	0.11		0.07	
Control Delay	1.4	0.7		2.4	1.6			24.8	0.1		20.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	1.4	0.7		2.4	1.6			24.8	0.1		20.6	
LOS	A	A		A	A			C	A		C	
Approach Delay		0.7			1.8			3.1			20.6	
Approach LOS		A			A			A			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 40 (67%), Referenced to phase 2:EBWB and 6:EBT, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.13			
Intersection Signal Delay: 2.0		Intersection LOS: A	
Intersection Capacity Utilization 31.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 61: Coca-Cola Pl & Houston St



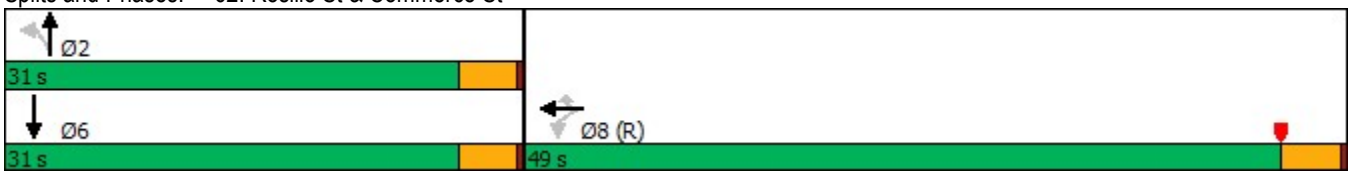


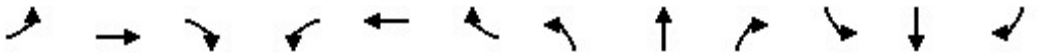
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	10	537	53	10	28	0	0	32	70
Future Volume (vph)	0	0	0	10	537	53	10	28	0	0	32	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.908	
Flt Protected					0.999			0.987				
Satd. Flow (prot)	0	0	0	0	3536	1583	0	1839	0	0	1691	0
Flt Permitted					0.999			0.808				
Satd. Flow (perm)	0	0	0	0	3536	1583	0	1505	0	0	1691	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						66					87	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		395			352			390			178	
Travel Time (s)		9.0			8.0			8.9			4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	0	0	0	12	665	66	12	35	0	0	40	87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	677	66	0	47	0	0	127	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				20	100	20	20	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				20	6	20	20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					8			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				8		8	2					
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Minimum Split (s)				20.0	20.0	20.0	20.0	20.0			20.0	
Total Split (s)				49.0	49.0	49.0	31.0	31.0			31.0	
Total Split (%)				61.3%	61.3%	61.3%	38.8%	38.8%			38.8%	
Maximum Green (s)				45.0	45.0	45.0	27.0	27.0			27.0	
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5			3.5	
All-Red Time (s)				0.5	0.5	0.5	0.5	0.5			0.5	
Lost Time Adjust (s)					0.0	0.0		0.0			0.0	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				C-Min	C-Min	C-Min	None	None			None	
Walk Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Flash Dont Walk (s)				11.0	11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)					66.5	66.5		8.2			8.2	
Actuated g/C Ratio					0.83	0.83		0.10			0.10	
v/c Ratio					0.23	0.05		0.31			0.51	
Control Delay					2.2	0.6		37.4			20.2	
Queue Delay					0.1	0.0		0.0			0.0	
Total Delay					2.3	0.6		37.4			20.2	
LOS					A	A		D			C	
Approach Delay					2.1			37.4			20.2	
Approach LOS					A			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 50 (63%), Referenced to phase 8:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 6.4		Intersection LOS: A	
Intersection Capacity Utilization 32.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 62: Rosillo St & Commerce St



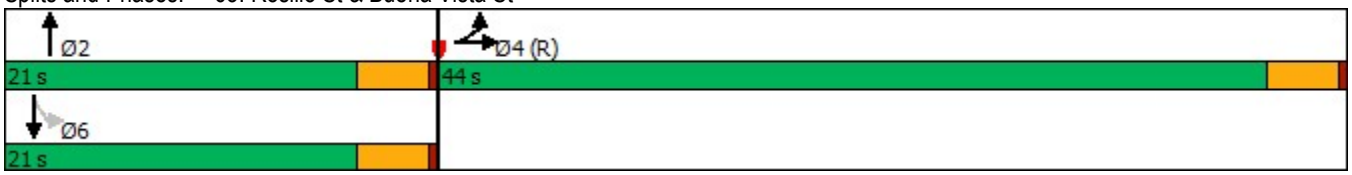


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	658	4	0	0	0	0	8	8	27	15	0
Future Volume (vph)	30	658	4	0	0	0	0	8	8	27	15	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.932				
Flt Protected	0.950										0.969	
Satd. Flow (prot)	1770	1861	0	0	0	0	0	1736	0	0	1805	0
Flt Permitted	0.950										0.796	
Satd. Flow (perm)	1770	1861	0	0	0	0	0	1736	0	0	1483	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1						10				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		401			359			376			390	
Travel Time (s)		9.1			8.2			8.5			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	37	815	5	0	0	0	0	10	10	33	19	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	820	0	0	0	0	0	20	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Split	NA						NA		Perm	NA	
Protected Phases	4	4						2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases										6		
Detector Phase	4	4						2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0						5.0		5.0	5.0	
Minimum Split (s)	20.0	20.0						20.0		20.0	20.0	
Total Split (s)	44.0	44.0						21.0		21.0	21.0	
Total Split (%)	67.7%	67.7%						32.3%		32.3%	32.3%	
Maximum Green (s)	40.0	40.0						17.0		17.0	17.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5						0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0						0.0			0.0	
Total Lost Time (s)	4.0	4.0						4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Recall Mode	C-Max	C-Max						None		None	None	
Walk Time (s)	5.0	5.0						5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0						11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)	54.9	54.9						7.5			7.6	
Actuated g/C Ratio	0.84	0.84						0.12			0.12	
v/c Ratio	0.02	0.52						0.10			0.30	
Control Delay	2.3	4.5						18.7			30.1	
Queue Delay	0.0	0.6						0.0			0.0	
Total Delay	2.3	5.1						18.7			30.1	
LOS	A	A						B			C	
Approach Delay		5.0						18.7			30.1	
Approach LOS		A						B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 21 (32%), Referenced to phase 4:EBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 6.7		Intersection LOS: A	
Intersection Capacity Utilization 55.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 63: Rosillo St & Buena Vista St



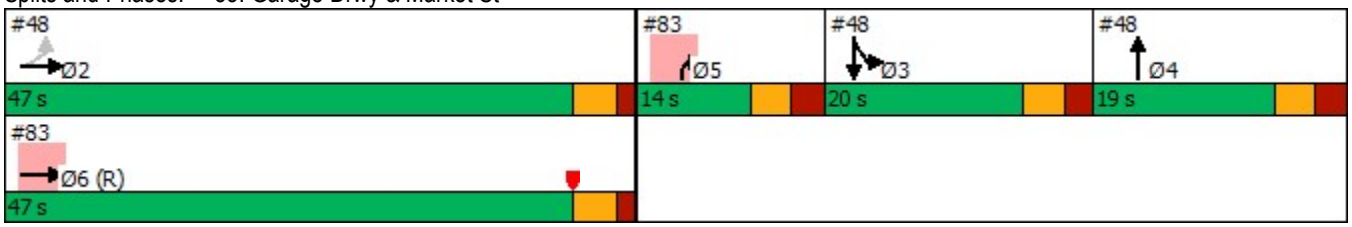


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø3	Ø4
Lane Configurations									
Traffic Volume (vph)	0	0	0	0	0	0			
Future Volume (vph)	0	0	0	0	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Lane Util. Factor	0.91	1.00	1.00	1.00	1.00	1.00			
Frt									
Flt Protected									
Satd. Flow (prot)	5085	0	0	0	0	1863			
Flt Permitted									
Satd. Flow (perm)	5085	0	0	0	0	1863			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)									
Link Speed (mph)	30			30	30				
Link Distance (ft)	168			646	250				
Travel Time (s)	3.8			14.7	5.7				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Growth Factor	114%	114%	114%	114%	114%	114%			
Adj. Flow (vph)	0	0	0	0	0	0			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	0	0	0	0			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	0			0	0				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)		9	15		15	9			
Number of Detectors	2					1			
Detector Template	Thru					Right			
Leading Detector (ft)	100					20			
Trailing Detector (ft)	0					0			
Detector 1 Position(ft)	0					0			
Detector 1 Size(ft)	6					20			
Detector 1 Type	Cl+Ex					Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0					0.0			
Detector 1 Queue (s)	0.0					0.0			
Detector 1 Delay (s)	0.0					0.0			
Detector 2 Position(ft)	94								
Detector 2 Size(ft)	6								
Detector 2 Type	Cl+Ex								
Detector 2 Channel									
Detector 2 Extend (s)	0.0								
Turn Type						Prot			
Protected Phases	6					5	2	3	4
Permitted Phases									
Detector Phase	6					5			
Switch Phase									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø3	Ø4
Minimum Initial (s)	10.0					1.5	10.0	5.0	3.0
Minimum Split (s)	14.7					7.0	14.7	10.3	8.5
Total Split (s)	47.0					14.0	47.0	20.0	19.0
Total Split (%)	47.0%					14.0%	47%	20%	19%
Maximum Green (s)	42.3					8.5	42.3	14.7	13.5
Yellow Time (s)	3.2					3.0	3.2	3.2	3.0
All-Red Time (s)	1.5					2.5	1.5	2.1	2.5
Lost Time Adjust (s)	0.0					0.0			
Total Lost Time (s)	4.7					5.5			
Lead/Lag						Lead		Lag	
Lead-Lag Optimize?						Yes		Yes	
Vehicle Extension (s)	1.0					1.0	1.0	1.0	1.0
Recall Mode	C-Min					Max	Min	None	None
Walk Time (s)	7.0						7.0		4.0
Flash Dont Walk (s)	27.0						27.0		13.0
Pedestrian Calls (#/hr)	0						0		0
Act Effct Green (s)									
Actuated g/C Ratio									
v/c Ratio									
Control Delay									
Queue Delay									
Total Delay									
LOS									
Approach Delay									
Approach LOS									

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 10 (10%), Referenced to phase 6:EBT, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 0.0		Intersection LOS: A	
Intersection Capacity Utilization 0.0%		ICU Level of Service A	
Analysis Period (min) 15			

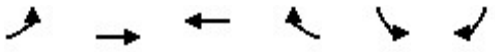
Splits and Phases: 83: Garage Drwy & Market St





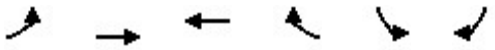
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	852	12	0	550	0	61
Future Volume (vph)	852	12	0	550	0	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	1859	0	0	1863	0	1611
Flt Permitted						
Satd. Flow (perm)	1859	0	0	1863	0	1611
Link Speed (mph)	30			30	30	
Link Distance (ft)	130			199	251	
Travel Time (s)	3.0			4.5	5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	1056	15	0	682	0	76
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1071	0	0	682	0	76
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.9%		ICU Level of Service B	
Analysis Period (min) 15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	913	544	61	0	6
Future Volume (vph)	0	913	544	61	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.986			0.865
Flt Protected						
Satd. Flow (prot)	0	1863	1837	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	1863	1837	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		199	330		250	
Travel Time (s)		4.5	7.5		5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	0	1131	674	76	0	7
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1131	750	0	0	7
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.1%		ICU Level of Service B	
Analysis Period (min) 15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	902	509	37	0	26
Future Volume (vph)	0	902	509	37	0	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.991			0.865
Flt Protected						
Satd. Flow (prot)	0	1863	1846	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	1863	1846	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		293	171		220	
Travel Time (s)		6.7	3.9		5.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	0	1118	631	46	0	32
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1118	677	0	0	32
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 57.5%		ICU Level of Service B	
Analysis Period (min) 15			



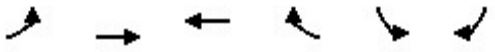
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	882	20	0	546	0	37
Future Volume (vph)	882	20	0	546	0	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	1857	0	0	1863	0	1611
Flt Permitted						
Satd. Flow (perm)	1857	0	0	1863	0	1611
Link Speed (mph)	30			30	30	
Link Distance (ft)	171			334	246	
Travel Time (s)	3.9			7.6	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	1093	25	0	677	0	46
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1118	0	0	677	0	46
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 64.3%		ICU Level of Service C	
Analysis Period (min) 15			



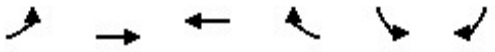
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	856	44	0	569	0	62
Future Volume (vph)	856	44	0	569	0	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993					0.865
Flt Protected						
Satd. Flow (prot)	1850	0	0	1863	0	1611
Flt Permitted						
Satd. Flow (perm)	1850	0	0	1863	0	1611
Link Speed (mph)	30			30	30	
Link Distance (ft)	512			413	390	
Travel Time (s)	11.6			9.4	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	1061	55	0	705	0	77
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1116	0	0	705	0	77
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 65.4%		ICU Level of Service C	
Analysis Period (min) 15			



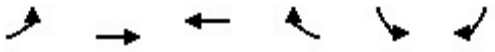
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	918	547	31	0	22
Future Volume (vph)	0	918	547	31	0	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.993			0.865
Flt Protected						
Satd. Flow (prot)	0	1863	1850	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	1863	1850	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		413	262		353	
Travel Time (s)		9.4	6.0		8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	0	1138	678	38	0	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1138	716	0	0	27
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.4%		ICU Level of Service B	
Analysis Period (min) 15			



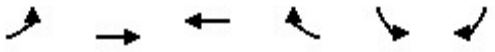
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	918	556	31	0	22
Future Volume (vph)	0	918	556	31	0	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.993			0.865
Flt Protected						
Satd. Flow (prot)	0	1863	1850	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	1863	1850	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		262	545		354	
Travel Time (s)		6.0	12.4		8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	0	1138	689	38	0	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1138	727	0	0	27
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.4%		ICU Level of Service B	
Analysis Period (min) 15			

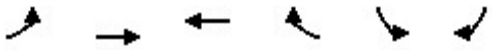


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	649	519	0	0	11
Future Volume (vph)	0	649	519	0	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	1863	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	1863	1863	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		414	262		341	
Travel Time (s)		9.4	6.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	0	804	643	0	0	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	804	643	0	0	14
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.3%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	5085	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	5085	0	0	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						
Link Speed (mph)		30	30		30	
Link Distance (ft)		412	427		472	
Travel Time (s)		9.4	9.7		10.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type						
Protected Phases			8			
Permitted Phases						
Minimum Split (s)			20.0			
Total Split (s)			20.0			
Total Split (%)			100.0%			
Maximum Green (s)			16.0			
Yellow Time (s)			3.5			
All-Red Time (s)			0.5			
Lost Time Adjust (s)			0.0			
Total Lost Time (s)			4.0			
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			5.0			
Flash Dont Walk (s)			11.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						

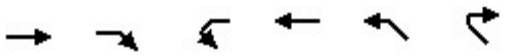


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Delay						
LOS						
Approach Delay						
Approach LOS						

Intersection Summary			
Area Type:	Other		
Cycle Length: 20			
Actuated Cycle Length: 20			
Offset: 0 (0%), Referenced to phase 2: and 6:, Start of Green			
Natural Cycle: 40			
Control Type: Pretimed			
Maximum v/c Ratio: 0.00			
Intersection Signal Delay: 0.0		Intersection LOS: A	
Intersection Capacity Utilization 0.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 122: Commerce St & Camaron St





Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	638	0	450	0	0
Future Volume (vph)	0	638	0	450	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865				
Flt Protected						
Satd. Flow (prot)	0	1611	0	1863	0	0
Flt Permitted						
Satd. Flow (perm)	0	1611	0	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	262			1003	928	
Travel Time (s)	6.0			22.8	21.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	693	0	489	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	693	0	489	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.8%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	211	436	239	16	203	580	217	308	866	156	199	932
Future Volume (vph)	211	436	239	16	203	580	217	308	866	156	199	932
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	220		220		240		240	230		0	220	
Storage Lanes	0		0		0		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.91	0.91	1.00	0.91
Frt		0.947				0.959			0.977			0.975
Flt Protected	0.950				0.950			0.950			0.950	
Satd. Flow (prot)	1770	3352	0	0	1770	3394	0	1770	4968	0	1770	4958
Flt Permitted	0.950				0.950			0.230			0.230	
Satd. Flow (perm)	1770	3352	0	0	1770	3394	0	428	4968	0	428	4958
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		70				37			28			32
Link Speed (mph)		30				30			30			30
Link Distance (ft)		692				701			879			693
Travel Time (s)		15.7				15.9			20.0			15.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	255	526	288	19	245	700	262	372	1045	188	240	1124
Shared Lane Traffic (%)												
Lane Group Flow (vph)	255	814	0	0	264	962	0	372	1233	0	240	1354
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors	1	2		1	1	2		1	2		1	2
Detector Template	Left	Thru			Left	Thru		Left	Thru		Left	Thru
Leading Detector (ft)	20	100		0	20	100		20	100		20	100
Trailing Detector (ft)	0	0		0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0		0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6		0	20	6		20	6		20	6
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94				94			94			94
Detector 2 Size(ft)		6				6			6			6
Detector 2 Type		Cl+Ex				Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0			0.0			0.0
Turn Type	Prot	NA		Prot	Prot	NA		pm+pt	NA		pm+pt	NA
Protected Phases	7	4		3	3	8		5	2		1	6



Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	191
Future Volume (vph)	191
Ideal Flow (vphpl)	1900
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.91
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.92
Growth Factor	111%
Adj. Flow (vph)	230
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Permitted Phases								2			6	
Detector Phase	7	4		3	3	8		5	2		1	6
Switch Phase												
Minimum Initial (s)	3.0	6.0		3.0	3.0	6.0		3.0	10.0		3.0	10.0
Minimum Split (s)	8.7	33.7		8.7	8.7	37.7		8.7	37.7		8.7	36.7
Total Split (s)	24.0	38.0		26.0	26.0	40.0		28.0	53.0		23.0	48.0
Total Split (%)	17.1%	27.1%		18.6%	18.6%	28.6%		20.0%	37.9%		16.4%	34.3%
Maximum Green (s)	18.3	32.3		20.3	20.3	34.3		22.3	47.3		17.3	42.3
Yellow Time (s)	3.9	3.9		3.9	3.9	3.9		3.6	3.6		3.6	3.6
All-Red Time (s)	1.8	1.8		1.8	1.8	1.8		2.1	2.1		2.1	2.1
Lost Time Adjust (s)	-0.7	-1.7			-0.7	-1.7		-0.8	-1.7		-0.8	-1.7
Total Lost Time (s)	5.0	4.0			5.0	4.0		4.9	4.0		4.9	4.0
Lead/Lag	Lead	Lead		Lag	Lag	Lag		Lead	Lead		Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes	Yes
Vehicle Extension (s)	1.0	1.0		1.0	1.0	1.0		1.0	1.0		1.0	1.0
Recall Mode	None	None		None	None	None		None	C-Min		None	C-Min
Walk Time (s)		7.0				7.0			7.0			7.0
Flash Dont Walk (s)		21.0				25.0			25.0			24.0
Pedestrian Calls (#/hr)		0				0			0			0
Act Effct Green (s)	20.7	33.7			23.0	36.0		40.5	41.4		41.4	42.3
Actuated g/C Ratio	0.15	0.24			0.16	0.26		0.29	0.30		0.30	0.30
v/c Ratio	0.98	0.95			0.91	1.07		1.08	0.83		0.67	0.89
Control Delay	108.5	67.6			86.6	95.5		113.1	50.0		60.9	53.8
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	108.5	67.6			86.6	95.5		113.1	50.0		60.9	53.8
LOS	F	E			F	F		F	D		E	D
Approach Delay		77.3				93.6			64.6			54.8
Approach LOS		E				F			E			D

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow, Master Intersection
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.08
Intersection Signal Delay: 70.7 Intersection LOS: E
Intersection Capacity Utilization 97.0% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 1: General McMullen Dr & Commerce St





Lane Group	SBR
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

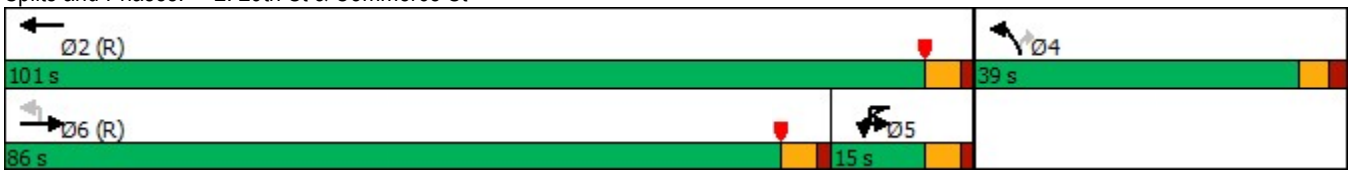
Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations								
Traffic Volume (vph)	68	686	19	17	33	1040	8	28
Future Volume (vph)	68	686	19	17	33	1040	8	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150		150		135	0
Storage Lanes	0		0		1		1	1
Taper Length (ft)	25				25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							0.91	0.89
Frt		0.997						0.850
Flt Protected		0.996			0.950		0.950	
Satd. Flow (prot)	0	1850	0	0	1770	1863	1770	1583
Flt Permitted		0.701			0.950		0.950	
Satd. Flow (perm)	0	1302	0	0	1770	1863	1615	1416
Right Turn on Red			Yes					Yes
Satd. Flow (RTOR)		2						34
Link Speed (mph)		30				30	30	
Link Distance (ft)		280				282	530	
Travel Time (s)		6.4				6.4	12.0	
Confl. Peds. (#/hr)							30	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	82	828	23	21	40	1255	10	34
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	933	0	0	61	1255	10	34
Enter Blocked Intersection	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Right	R NA	Left	Left	Left	Right
Median Width(ft)		12				12	12	
Link Offset(ft)		0				0	0	
Crosswalk Width(ft)		16				16	16	
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9		9	9	15		15	9
Number of Detectors	1	2		1	1	2	1	1
Detector Template		Thru			Left	Thru	Left	
Leading Detector (ft)	0	100		0	20	100	20	0
Trailing Detector (ft)	0	0		0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0
Detector 1 Size(ft)	0	6		0	20	6	20	0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94				94		
Detector 2 Size(ft)		6				6		
Detector 2 Type		Cl+Ex				Cl+Ex		
Detector 2 Channel								
Detector 2 Extend (s)		0.0				0.0		

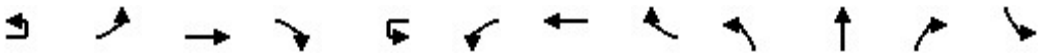
Lane Group	EBU	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Turn Type	Perm	NA		Prot	Prot	NA	Prot	Perm
Protected Phases		6		5	5	2	4	
Permitted Phases	6							4
Detector Phase	6	6		5	5	2	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0		3.0	3.0	10.0	3.0	3.0
Minimum Split (s)	19.1	19.1		8.1	8.1	15.1	29.3	29.3
Total Split (s)	86.0	86.0		15.0	15.0	101.0	39.0	39.0
Total Split (%)	61.4%	61.4%		10.7%	10.7%	72.1%	27.9%	27.9%
Maximum Green (s)	80.9	80.9		9.9	9.9	95.9	33.7	33.7
Yellow Time (s)	3.6	3.6		3.6	3.6	3.6	3.2	3.2
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5	2.1	2.1
Lost Time Adjust (s)		-0.6			-0.5	-0.6	-1.3	0.0
Total Lost Time (s)		4.5			4.6	4.5	4.0	5.3
Lead/Lag	Lead	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes			
Vehicle Extension (s)	1.0	1.0		0.5	0.5	1.0	1.0	1.0
Recall Mode	C-Min	C-Min		None	None	C-Min	None	None
Walk Time (s)	7.0	7.0					7.0	7.0
Flash Dont Walk (s)	7.0	7.0					17.0	17.0
Pedestrian Calls (#/hr)	0	0					0	0
Act Effct Green (s)		117.4			7.8	128.1	6.0	4.7
Actuated g/C Ratio		0.84			0.06	0.92	0.04	0.03
v/c Ratio		0.85			0.62	0.74	0.13	0.42
Control Delay		23.6			92.5	9.0	67.2	35.6
Queue Delay		0.0			0.0	2.8	0.0	0.0
Total Delay		23.6			92.5	11.8	67.2	35.6
LOS		C			F	B	E	D
Approach Delay		23.6				15.5	42.8	
Approach LOS		C				B	D	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 44 (31%), Referenced to phase 2:WBT and 6:EBTU, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 19.3 Intersection LOS: B
Intersection Capacity Utilization 126.8% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 2: 29th St & Commerce St





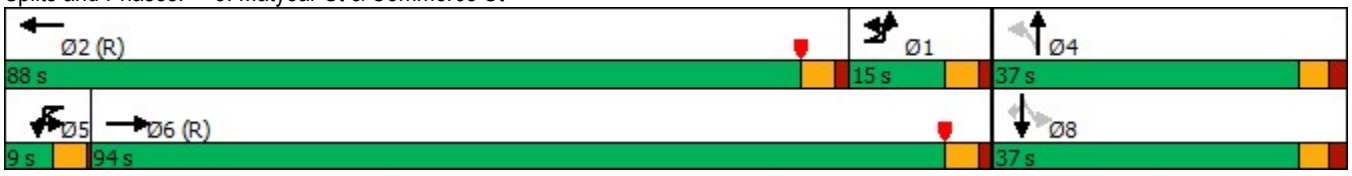
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	31	14	730	12	36	6	1017	11	5	10	5	33
Future Volume (vph)	31	14	730	12	36	6	1017	11	5	10	5	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		120		150		130		150	0		0	0
Storage Lanes		1		0		1		0	0		0	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor										0.96		
Frt			0.998				0.998			0.966		
Flt Protected		0.950				0.950				0.988		
Satd. Flow (prot)	0	1770	1859	0	0	1770	1859	0	0	1732	0	0
Flt Permitted		0.950				0.950				0.915		
Satd. Flow (perm)	0	1770	1859	0	0	1770	1859	0	0	1573	0	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1				1			6		
Link Speed (mph)			30				30			30		
Link Distance (ft)			335				552			484		
Travel Time (s)			7.6				12.5			11.0		
Confl. Peds. (#/hr)									30		30	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	37	17	881	14	43	7	1227	13	6	12	6	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	54	895	0	0	50	1240	0	0	24	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			0		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2		1
Detector Template		Left	Thru			Left	Thru		Left	Thru		Left
Leading Detector (ft)	0	20	100		0	20	100		0	100		0
Trailing Detector (ft)	0	0	0		0	0	0		0	0		0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0		0
Detector 1 Size(ft)	0	20	6		0	20	6		0	6		0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	4	57
Future Volume (vph)	4	57
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		120
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor	0.93	0.90
Frt		0.850
Flt Protected	0.957	
Satd. Flow (prot)	1783	1583
Flt Permitted	0.846	
Satd. Flow (perm)	1462	1421
Right Turn on Red		Yes
Satd. Flow (RTOR)		87
Link Speed (mph)	30	
Link Distance (ft)	302	
Travel Time (s)	6.9	
Confl. Peds. (#/hr)		30
Peak Hour Factor	0.92	0.92
Growth Factor	111%	111%
Adj. Flow (vph)	5	69
Shared Lane Traffic (%)		
Lane Group Flow (vph)	45	69
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	0	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	
Leading Detector (ft)	100	0
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	0
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Perm	NA		Perm
Protected Phases	1	1	6		5	5	2			4		
Permitted Phases									4			8
Detector Phase	1	1	6		5	5	2		4	4		8
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		5.0	5.0	10.0		6.0	6.0		6.0
Minimum Split (s)	8.1	8.1	37.1		9.0	9.0	19.1		30.3	30.3		30.3
Total Split (s)	15.0	15.0	94.0		9.0	9.0	88.0		37.0	37.0		37.0
Total Split (%)	10.7%	10.7%	67.1%		6.4%	6.4%	62.9%		26.4%	26.4%		26.4%
Maximum Green (s)	9.9	9.9	88.9		5.0	5.0	82.9		31.7	31.7		31.7
Yellow Time (s)	3.6	3.6	3.6		3.5	3.5	3.6		3.2	3.2		3.2
All-Red Time (s)	1.5	1.5	1.5		0.5	0.5	1.5		2.1	2.1		2.1
Lost Time Adjust (s)		-0.2	-0.6			-0.6	-0.6			-1.3		
Total Lost Time (s)		4.9	4.5			3.4	4.5			4.0		
Lead/Lag	Lag	Lag	Lag		Lead	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	1.0	1.0	1.0		3.0	3.0	1.0		1.0	1.0		1.0
Recall Mode	None	None	C-Min		None	None	C-Min		None	None		None
Walk Time (s)			7.0				7.0		7.0	7.0		7.0
Flash Dont Walk (s)			7.0				7.0		18.0	18.0		18.0
Pedestrian Calls (#/hr)			0				0		0	0		0
Act Effct Green (s)		7.6	113.0			10.4	114.1			9.9		
Actuated g/C Ratio		0.05	0.81			0.07	0.82			0.07		
v/c Ratio		0.57	0.60			0.38	0.82			0.21		
Control Delay		76.7	9.0			68.4	10.5			52.6		
Queue Delay		0.0	0.5			0.0	0.7			0.0		
Total Delay		76.7	9.6			68.4	11.2			52.6		
LOS		E	A			E	B			D		
Approach Delay			13.4				13.4			52.6		
Approach LOS			B				B			D		

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 15.0		Intersection LOS: B	
Intersection Capacity Utilization 102.3%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 3: Matyear St & Commerce St





Lane Group	SBT	SBR
Turn Type	NA	Perm
Protected Phases	8	
Permitted Phases		8
Detector Phase	8	8
Switch Phase		
Minimum Initial (s)	6.0	6.0
Minimum Split (s)	30.3	30.3
Total Split (s)	37.0	37.0
Total Split (%)	26.4%	26.4%
Maximum Green (s)	31.7	31.7
Yellow Time (s)	3.2	3.2
All-Red Time (s)	2.1	2.1
Lost Time Adjust (s)	-1.3	0.0
Total Lost Time (s)	4.0	5.3
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	1.0	1.0
Recall Mode	None	None
Walk Time (s)	7.0	7.0
Flash Dont Walk (s)	18.0	18.0
Pedestrian Calls (#/hr)	0	0
Act Effct Green (s)	9.9	8.6
Actuated g/C Ratio	0.07	0.06
v/c Ratio	0.44	0.41
Control Delay	74.5	14.1
Queue Delay	0.0	0.0
Total Delay	74.5	14.1
LOS	E	B
Approach Delay	37.9	
Approach LOS	D	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	50	210	410	101	15	200	759	100	150	209	118	28
Future Volume (vph)	50	210	410	101	15	200	759	100	150	209	118	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		160		122		150		120	128		0	147
Storage Lanes		1		0		1		0	1		0	1
Taper Length (ft)		25				25			25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		0.99	0.99			0.98	0.99		0.94	0.96		0.96
Frt			0.970				0.982			0.946		
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1770	1783	0	0	1770	1814	0	1770	3211	0	1770
Flt Permitted		0.950				0.950			0.329			0.264
Satd. Flow (perm)	0	1744	1783	0	0	1728	1814	0	577	3211	0	470
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			11				5			74		
Link Speed (mph)			30				30			30		
Link Distance (ft)			372				314			490		
Travel Time (s)			8.5				7.1			11.1		
Confl. Peds. (#/hr)		30		30		30		30	30		30	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	60	253	495	122	18	241	916	121	181	252	142	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	313	617	0	0	259	1037	0	181	394	0	34
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2		1
Detector Template		Left	Thru			Left	Thru		Left	Thru		Left
Leading Detector (ft)	0	20	100		0	20	100		20	100		20
Trailing Detector (ft)	0	0	0		0	0	0		0	0		0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0		0
Detector 1 Size(ft)	0	20	6		0	20	6		20	6		20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

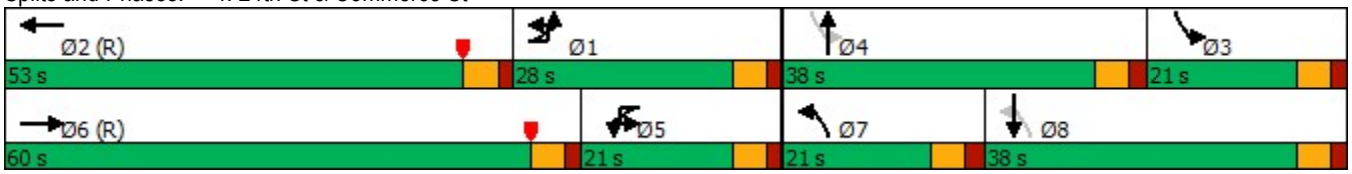
Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	126	83
Future Volume (vph)	126	83
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	0.95	0.95
Ped Bike Factor	0.96	
Frt	0.940	
Flt Protected		
Satd. Flow (prot)	3182	0
Flt Permitted		
Satd. Flow (perm)	3182	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	100	
Link Speed (mph)	30	
Link Distance (ft)	331	
Travel Time (s)	7.5	
Confl. Peds. (#/hr)		30
Peak Hour Factor	0.92	0.92
Growth Factor	111%	111%
Adj. Flow (vph)	152	100
Shared Lane Traffic (%)		
Lane Group Flow (vph)	252	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Turn Type	Prot	Prot	NA		Prot	Prot	NA		D.P+P	NA		D.P+P
Protected Phases	1	1	6		5	5	2		7	4		3
Permitted Phases									8			4
Detector Phase	1	1	6		5	5	2		7	4		3
Switch Phase												
Minimum Initial (s)	3.0	3.0	10.0		3.0	3.0	10.0		3.0	6.0		3.0
Minimum Split (s)	8.2	8.2	28.2		8.2	8.2	26.2		8.5	27.5		8.5
Total Split (s)	28.0	28.0	60.0		21.0	21.0	53.0		21.0	38.0		21.0
Total Split (%)	20.0%	20.0%	42.9%		15.0%	15.0%	37.9%		15.0%	27.1%		15.0%
Maximum Green (s)	22.8	22.8	54.8		15.8	15.8	47.8		15.5	32.5		15.5
Yellow Time (s)	3.6	3.6	3.6		3.6	3.6	3.6		3.6	3.6		3.6
All-Red Time (s)	1.6	1.6	1.6		1.6	1.6	1.6		1.9	1.9		1.9
Lost Time Adjust (s)		0.0	-1.1			0.0	-1.1		0.0	-1.1		0.0
Total Lost Time (s)		5.2	4.1			5.2	4.1		5.5	4.4		5.5
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead		Lead	Lead		Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes		Yes
Vehicle Extension (s)	0.5	0.5	1.0		0.5	0.5	1.0		0.5	1.0		0.5
Recall Mode	None	None	C-Min		None	None	C-Min		None	None		None
Walk Time (s)			7.0				7.0			7.0		
Flash Dont Walk (s)			16.0				14.0			15.0		
Pedestrian Calls (#/hr)			0				0			0		
Act Effct Green (s)		22.8	65.7			29.6	72.6		24.3	23.1		26.5
Actuated g/C Ratio		0.16	0.47			0.21	0.52		0.17	0.16		0.19
v/c Ratio		1.09	0.73			0.69	1.10		0.83	0.67		0.24
Control Delay		127.3	33.7			62.4	93.6		77.1	50.5		49.7
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0		0.0
Total Delay		127.3	33.7			62.4	93.6		77.1	50.5		49.7
LOS		F	C			E	F		E	D		D
Approach Delay			65.2				87.4			58.9		
Approach LOS			E				F			E		

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 113 (81%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.10
Intersection Signal Delay: 71.8 Intersection LOS: E
Intersection Capacity Utilization 107.6% ICU Level of Service G
Analysis Period (min) 15

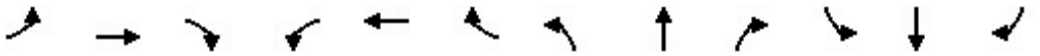
Splits and Phases: 4: 24th St & Commerce St





Lane Group	SBT	SBR
Turn Type	NA	
Protected Phases	8	
Permitted Phases		
Detector Phase	8	
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	28.5	
Total Split (s)	38.0	
Total Split (%)	27.1%	
Maximum Green (s)	32.5	
Yellow Time (s)	3.6	
All-Red Time (s)	1.9	
Lost Time Adjust (s)	-1.1	
Total Lost Time (s)	4.4	
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	1.0	
Recall Mode	None	
Walk Time (s)	7.0	
Flash Dont Walk (s)	16.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	11.5	
Actuated g/C Ratio	0.08	
v/c Ratio	0.71	
Control Delay	48.5	
Queue Delay	0.0	
Total Delay	48.5	
LOS	D	
Approach Delay	48.7	
Approach LOS	D	

Intersection Summary



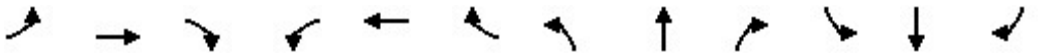
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	62	1019	23	48	44	0	0	49	23
Future Volume (vph)	0	0	0	62	1019	23	48	44	0	0	49	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	120		130	125		0	0		0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.94	1.00							
Frt					0.997						0.957	
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1610	3374	0	1770	1863	0	0	1783	0
Flt Permitted				0.950			0.701					
Satd. Flow (perm)	0	0	0	1510	3373	0	1306	1863	0	0	1783	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6						28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		383			1482			392			323	
Travel Time (s)		8.7			33.7			8.9			7.3	
Confl. Peds. (#/hr)				30		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	75	1229	28	58	53	0	0	59	28
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	67	1265	0	58	53	0	0	87	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				0	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				0	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0		6.0	6.0			6.0	
Minimum Split (s)				22.8	22.8		20.6	20.6			20.6	
Total Split (s)				53.0	53.0		22.0	22.0			22.0	
Total Split (%)				70.7%	70.7%		29.3%	29.3%			29.3%	
Maximum Green (s)				48.2	48.2		17.4	17.4			17.4	
Yellow Time (s)				3.6	3.6		3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2		1.4	1.4			1.4	
Lost Time Adjust (s)				0.0	-0.8		-0.6	-0.6			-0.6	
Total Lost Time (s)				4.8	4.0		4.0	4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				11.0	11.0		9.0	9.0			9.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				48.2	49.0		18.0	18.0			18.0	
Actuated g/C Ratio				0.64	0.65		0.24	0.24			0.24	
v/c Ratio				0.07	0.57		0.19	0.12			0.19	
Control Delay				5.3	8.5		24.6	23.2			17.8	
Queue Delay				0.0	0.0		0.0	0.0			0.0	
Total Delay				5.3	8.5		24.6	23.2			17.8	
LOS				A	A		C	C			B	
Approach Delay					8.3			23.9			17.8	
Approach LOS					A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 13 (17%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 10.0		Intersection LOS: A	
Intersection Capacity Utilization 43.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: 19th St & Commerce St



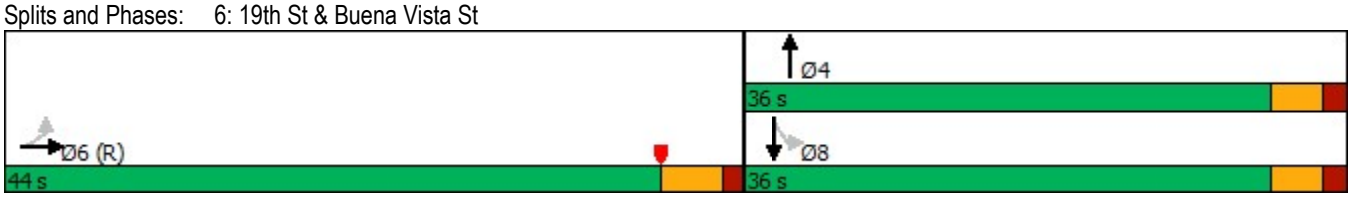


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	444	49	0	0	0	0	79	29	23	86	0
Future Volume (vph)	15	444	49	0	0	0	0	79	29	23	86	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	150		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97											
Frt		0.985						0.964				
Flt Protected	0.950										0.989	
Satd. Flow (prot)	1770	1835	0	0	0	0	0	1796	0	0	1842	0
Flt Permitted	0.950										0.931	
Satd. Flow (perm)	1716	1835	0	0	0	0	0	1796	0	0	1734	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10						27				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		532			1485			389			392	
Travel Time (s)		12.1			33.8			8.8			8.9	
Confl. Peds. (#/hr)	30											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	19	550	61	0	0	0	0	98	36	29	107	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	611	0	0	0	0	0	134	0	0	136	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	0	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	0	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	14.9	14.9						10.7		10.7	10.7	
Total Split (s)	44.0	44.0						36.0		36.0	36.0	
Total Split (%)	55.0%	55.0%						45.0%		45.0%	45.0%	
Maximum Green (s)	39.1	39.1						31.3		31.3	31.3	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3						1.5		1.5	1.5	
Lost Time Adjust (s)	-0.8	-0.8						-0.6			-0.6	
Total Lost Time (s)	4.1	4.1						4.1			4.1	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Act Effct Green (s)	39.9	39.9						31.9			31.9	
Actuated g/C Ratio	0.50	0.50						0.40			0.40	
v/c Ratio	0.02	0.66						0.18			0.20	
Control Delay	10.4	19.1						13.2			16.7	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay	10.4	19.1						13.2			16.7	
LOS	B	B						B			B	
Approach Delay		18.9						13.2			16.7	
Approach LOS		B						B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 16 (20%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 17.7		Intersection LOS: B	
Intersection Capacity Utilization 53.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: 19th St & Buena Vista St

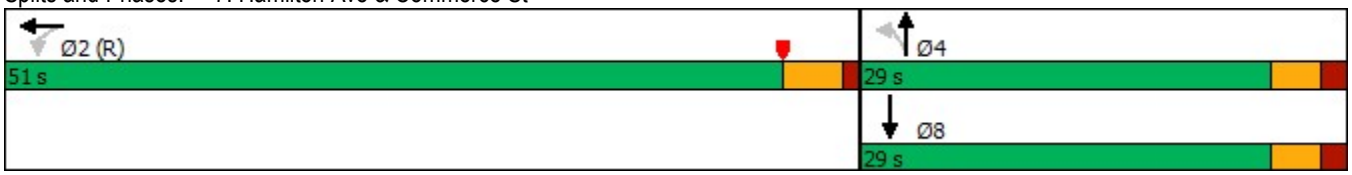


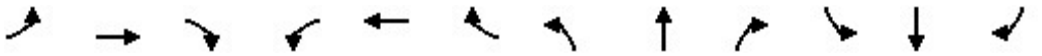
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	60	1051	36	33	80	0	0	67	19
Future Volume (vph)	0	0	0	60	1051	36	33	80	0	0	67	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	120		130	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.995						0.970	
Flt Protected				0.950				0.986				
Satd. Flow (prot)	0	0	0	1770	3522	0	0	1837	0	0	1807	0
Flt Permitted				0.950				0.871				
Satd. Flow (perm)	0	0	0	1770	3522	0	0	1622	0	0	1807	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					7						19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1482			1455			390			326	
Travel Time (s)		33.7			33.1			8.9			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	72	1268	43	40	97	0	0	81	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	72	1311	0	0	137	0	0	104	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				0	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				0	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0		6.0	6.0			6.0	
Minimum Split (s)				14.7	14.7		10.7	10.7			10.7	
Total Split (s)				51.0	51.0		29.0	29.0			29.0	
Total Split (%)				63.8%	63.8%		36.3%	36.3%			36.3%	
Maximum Green (s)				46.3	46.3		24.3	24.3			24.3	
Yellow Time (s)				3.6	3.6		3.0	3.0			3.0	
All-Red Time (s)				1.1	1.1		1.7	1.7			1.7	
Lost Time Adjust (s)				0.0	-0.8			-0.6			-0.6	
Total Lost Time (s)				4.7	3.9			4.1			4.1	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				C-Min	C-Min		None	None			None	
Act Effct Green (s)				60.4	61.2			10.8			10.8	
Actuated g/C Ratio				0.76	0.76			0.14			0.14	
v/c Ratio				0.05	0.49			0.63			0.40	
Control Delay				4.8	5.8			44.9			29.5	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				4.8	5.8			44.9			29.5	
LOS				A	A			D			C	
Approach Delay					5.7			44.9			29.5	
Approach LOS					A			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 75 (94%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 10.5		Intersection LOS: B	
Intersection Capacity Utilization 53.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Hamilton Ave & Commerce St



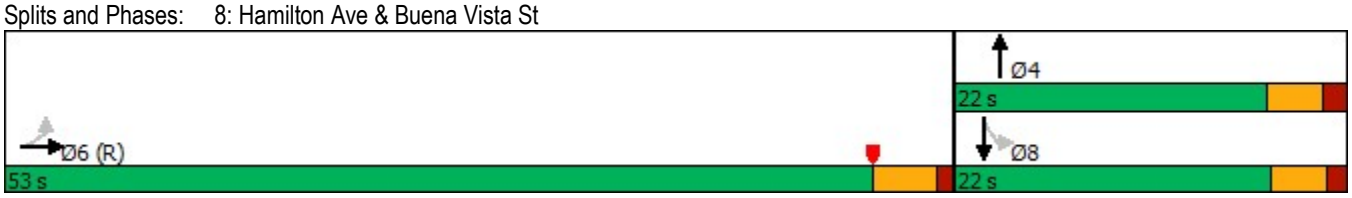


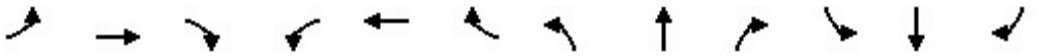
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	474	34	0	0	0	0	64	61	7	33	0
Future Volume (vph)	13	474	34	0	0	0	0	64	61	7	33	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990						0.934				
Flt Protected	0.950										0.991	
Satd. Flow (prot)	1770	1844	0	0	0	0	0	1740	0	0	1846	0
Flt Permitted	0.950										0.926	
Satd. Flow (perm)	1770	1844	0	0	0	0	0	1740	0	0	1725	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10						61				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1485			1450			392			390	
Travel Time (s)		33.8			33.0			8.9			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	16	587	42	0	0	0	0	79	76	9	41	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	629	0	0	0	0	0	155	0	0	50	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1						1		1	1	
Detector Template	Left	Right						Right		Left	Right	
Leading Detector (ft)	0	20						20		0	20	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	0	20						20		0	20	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	14.6	14.6						10.6		10.4	10.4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	53.0	53.0						22.0		22.0	22.0	
Total Split (%)	70.7%	70.7%						29.3%		29.3%	29.3%	
Maximum Green (s)	48.4	48.4						17.4		17.6	17.6	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.0	1.0						1.4		1.2	1.2	
Lost Time Adjust (s)	-0.6	-0.6						-0.6			-0.4	
Total Lost Time (s)	4.0	4.0						4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	C-Min	C-Min						None		None	None	
Act Effct Green (s)	58.0	58.0						9.0			9.0	
Actuated g/C Ratio	0.77	0.77						0.12			0.12	
v/c Ratio	0.01	0.44						0.59			0.24	
Control Delay	2.6	4.4						28.6			31.7	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay	2.6	4.4						28.6			31.7	
LOS	A	A						C			C	
Approach Delay		4.3						28.6			31.7	
Approach LOS		A						C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 2 (3%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 10.3		Intersection LOS: B	
Intersection Capacity Utilization 46.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: Hamilton Ave & Buena Vista St



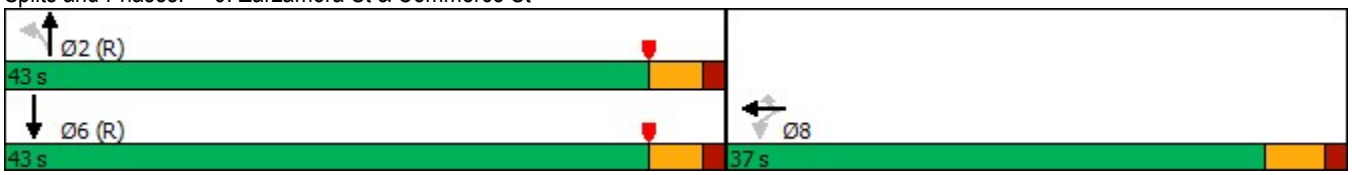


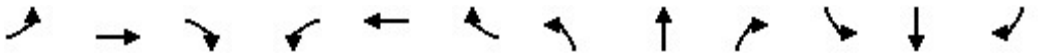
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	170	979	185	104	707	0	0	569	122
Future Volume (vph)	0	0	0	170	979	185	104	707	0	0	569	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor					1.00	0.97						
Frt						0.850					0.974	
Flt Protected					0.993			0.994				
Satd. Flow (prot)	0	0	0	0	3514	1583	0	3518	0	0	3447	0
Flt Permitted					0.993			0.663				
Satd. Flow (perm)	0	0	0	0	3503	1530	0	2346	0	0	3447	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						108					17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1455			398			389			155	
Travel Time (s)		33.1			9.0			8.8			3.5	
Confl. Peds. (#/hr)				30		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	205	1181	223	125	853	0	0	687	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1386	223	0	978	0	0	834	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2					
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				6.0	6.0	6.0	10.0	10.0			10.0	
Minimum Split (s)				11.0	11.0	11.0	14.7	14.7			14.7	
Total Split (s)				37.0	37.0	37.0	43.0	43.0			43.0	
Total Split (%)				46.3%	46.3%	46.3%	53.8%	53.8%			53.8%	
Maximum Green (s)				32.0	32.0	32.0	38.3	38.3			38.3	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.4	1.4	1.4	1.5	1.5			1.5	
Lost Time Adjust (s)					-0.8	-0.8		-0.8			-0.8	
Total Lost Time (s)					4.2	4.2		3.9			3.9	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				2.0	2.0	2.0	1.0	1.0			1.0	
Recall Mode				None	None	None	C-Min	C-Min			C-Min	
Act Effct Green (s)					33.9	33.9		38.0			38.0	
Actuated g/C Ratio					0.42	0.42		0.48			0.48	
v/c Ratio					0.94	0.31		0.88			0.51	
Control Delay					35.9	9.4		26.1			15.3	
Queue Delay					40.4	0.0		0.4			0.0	
Total Delay					76.3	9.4		26.5			15.3	
LOS					E	A		C			B	
Approach Delay					67.1			26.5			15.3	
Approach LOS					E			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 75 (94%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 42.9		Intersection LOS: D	
Intersection Capacity Utilization 92.5%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 9: Zarzamora St & Commerce St



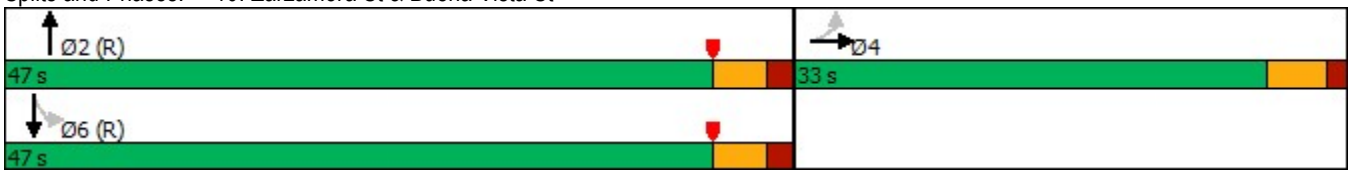


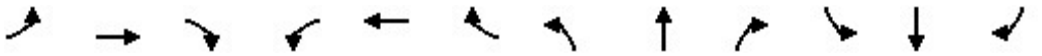
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	366	85	0	0	0	0	533	74	71	601	0
Future Volume (vph)	106	366	85	0	0	0	0	533	74	71	601	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00
Ped Bike Factor	0.97	0.99										
Frt		0.972						0.982				
Flt Protected	0.950										0.995	
Satd. Flow (prot)	1770	1798	0	0	0	0	0	3476	0	0	3522	0
Flt Permitted	0.950										0.786	
Satd. Flow (perm)	1725	1798	0	0	0	0	0	3476	0	0	2782	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16						29				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1450			402			394			389	
Travel Time (s)		33.0			9.1			9.0			8.8	
Confl. Peds. (#/hr)	30		30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	131	454	105	0	0	0	0	660	92	88	745	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	131	559	0	0	0	0	0	752	0	0	833	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1						1		1	1	
Detector Template	Left							Right		Left	Right	
Leading Detector (ft)	0	20						20		0	20	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	0	20						20		0	20	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4									6		
Detector Phase	4	4						2		6	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	6.0	6.0						10.0		10.0	10.0	
Minimum Split (s)	10.9	10.9						14.8		14.8	14.8	
Total Split (s)	33.0	33.0						47.0		47.0	47.0	
Total Split (%)	41.3%	41.3%						58.8%		58.8%	58.8%	
Maximum Green (s)	28.1	28.1						42.2		42.2	42.2	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3						1.6		1.6	1.6	
Lost Time Adjust (s)	-0.4	-0.4						-0.6			-0.6	
Total Lost Time (s)	4.5	4.5						4.2			4.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	None	None						C-Min		C-Min	C-Min	
Act Effct Green (s)	28.2	28.2						43.1			43.1	
Actuated g/C Ratio	0.35	0.35						0.54			0.54	
v/c Ratio	0.22	0.87						0.40			0.56	
Control Delay	17.8	37.9						12.0			9.3	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay	17.8	37.9						12.0			9.3	
LOS	B	D						B			A	
Approach Delay		34.1						12.0			9.3	
Approach LOS		C						B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 17.7		Intersection LOS: B	
Intersection Capacity Utilization 79.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 10: Zarzamora St & Buena Vista St





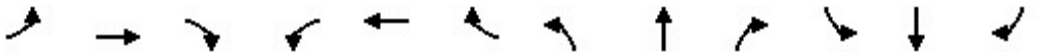
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	19	1121	169	26	55	0	0	61	68
Future Volume (vph)	0	0	0	19	1121	169	26	55	0	0	61	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected					0.999			0.984				
Satd. Flow (prot)	0	0	0	0	3536	1583	0	1833	0	0	1863	1583
Flt Permitted					0.999			0.865				
Satd. Flow (perm)	0	0	0	0	3536	1583	0	1611	0	0	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						191						36
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		349			708			395			185	
Travel Time (s)		7.9			16.1			9.0			4.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	23	1353	204	31	66	0	0	74	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1376	204	0	97	0	0	74	82
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				0	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				0	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	Perm
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2		2	4					8
Detector Phase				2	2	2	4	4			8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	6.0
Minimum Split (s)				15.0	15.0	15.0	10.8	10.8			10.8	10.8
Total Split (s)				47.0	47.0	47.0	33.0	33.0			33.0	33.0
Total Split (%)				58.8%	58.8%	58.8%	41.3%	41.3%			41.3%	41.3%
Maximum Green (s)				42.0	42.0	42.0	28.2	28.2			28.2	28.2
Yellow Time (s)				3.6	3.6	3.6	3.0	3.0			3.0	3.0
All-Red Time (s)				1.4	1.4	1.4	1.8	1.8			1.8	1.8
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	-0.6
Total Lost Time (s)					4.2	4.2		4.2			4.2	4.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	1.0
Recall Mode				C-Min	C-Min	C-Min	None	None			None	None
Act Effct Green (s)					65.6	65.6		9.0			9.0	9.0
Actuated g/C Ratio					0.82	0.82		0.11			0.11	0.11
v/c Ratio					0.47	0.15		0.54			0.35	0.39
Control Delay					1.6	0.2		42.8			36.7	25.6
Queue Delay					0.0	0.0		0.0			0.0	0.0
Total Delay					1.6	0.2		42.8			36.7	25.6
LOS					A	A		D			D	C
Approach Delay					1.4			42.8			30.8	
Approach LOS					A			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 66 (83%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 6.1		Intersection LOS: A	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

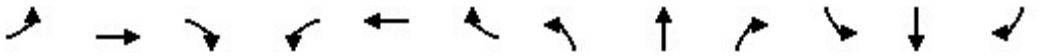
Splits and Phases: 11: Calaveras St & Commerce St





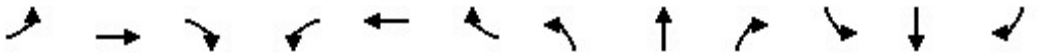
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	489	5	0	0	0	0	17	10	37	19	0
Future Volume (vph)	33	489	5	0	0	0	0	17	10	37	19	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.951				
Flt Protected	0.950										0.968	
Satd. Flow (prot)	1770	1861	0	0	0	0	0	1771	0	0	1803	0
Flt Permitted	0.950										0.968	
Satd. Flow (perm)	1770	1861	0	0	0	0	0	1771	0	0	1803	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		351			703			212			395	
Travel Time (s)		8.0			16.0			4.8			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	41	606	6	0	0	0	0	21	12	46	24	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	612	0	0	0	0	0	33	0	0	70	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	12	1269	9	9	7	0	0	10	9
Future Volume (vph)	0	0	0	12	1269	9	9	7	0	0	10	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.999						0.935	
Flt Protected								0.972				
Satd. Flow (prot)	0	0	0	0	3536	0	0	1811	0	0	1742	0
Flt Permitted								0.972				
Satd. Flow (perm)	0	0	0	0	3536	0	0	1811	0	0	1742	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		708			1447			391			285	
Travel Time (s)		16.1			32.9			8.9			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	14	1531	11	11	8	0	0	12	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1556	0	0	19	0	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.9%		ICU Level of Service A	
Analysis Period (min) 15			

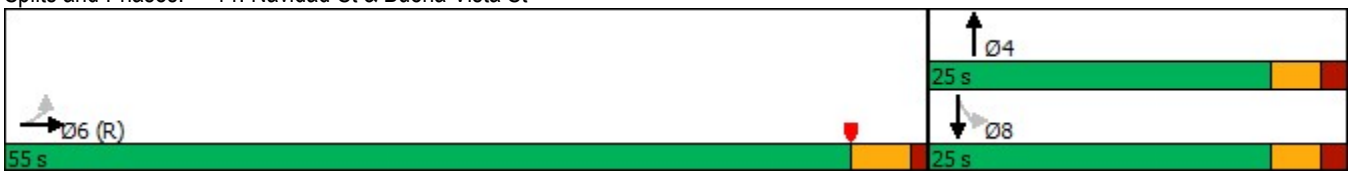


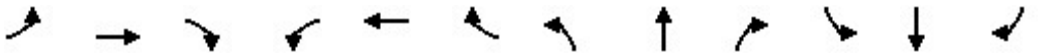
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	523	7	0	0	0	0	8	9	10	11	0
Future Volume (vph)	5	523	7	0	0	0	0	8	9	10	11	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998						0.929				
Flt Protected	0.950										0.977	
Satd. Flow (prot)	1770	1859	0	0	0	0	0	1730	0	0	1820	0
Flt Permitted	0.950										0.916	
Satd. Flow (perm)	1770	1859	0	0	0	0	0	1730	0	0	1706	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2						11				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		703			1448			392			391	
Travel Time (s)		16.0			32.9			8.9			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	6	648	9	0	0	0	0	10	11	12	14	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	657	0	0	0	0	0	21	0	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	0	100						100		0	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	0	6						6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	14.7	14.7						10.7		10.7	10.7	
Total Split (s)	55.0	55.0						25.0		25.0	25.0	
Total Split (%)	68.8%	68.8%						31.3%		31.3%	31.3%	
Maximum Green (s)	50.3	50.3						20.3		20.3	20.3	
Yellow Time (s)	3.6	3.6						3.0		3.0	3.0	
All-Red Time (s)	1.1	1.1						1.7		1.7	1.7	
Lost Time Adjust (s)	-0.6	-0.6						-0.5			-0.5	
Total Lost Time (s)	4.1	4.1						4.2			4.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Act Effct Green (s)	50.9	50.9						20.8			20.8	
Actuated g/C Ratio	0.64	0.64						0.26			0.26	
v/c Ratio	0.01	0.56						0.05			0.06	
Control Delay	6.8	11.2						15.6			19.3	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay	6.8	11.2						15.6			19.3	
LOS	A	B						B			B	
Approach Delay		11.2						15.6			19.3	
Approach LOS		B						B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 10 (13%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 11.6		Intersection LOS: B	
Intersection Capacity Utilization 46.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 14: Navidad St & Buena Vista St





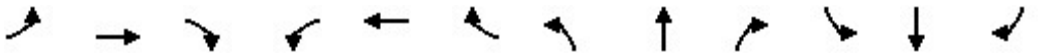
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	69	1174	22	105	57	0	0	55	11
Future Volume (vph)	0	0	0	69	1174	22	105	57	0	0	55	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.978	
Flt Protected					0.997			0.969				
Satd. Flow (prot)	0	0	0	0	3529	1583	0	1805	0	0	1822	0
Flt Permitted					0.997			0.770				
Satd. Flow (perm)	0	0	0	0	3529	1583	0	1434	0	0	1822	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						25					13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1447			1095			394			321	
Travel Time (s)		32.9			24.9			9.0			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	83	1416	27	127	69	0	0	66	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1499	27	0	196	0	0	79	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				23.0	23.0	23.0	22.8	22.8			36.8	
Total Split (s)				44.0	44.0	44.0	36.0	36.0			36.0	
Total Split (%)				55.0%	55.0%	55.0%	45.0%	45.0%			45.0%	
Maximum Green (s)				39.0	39.0	39.0	31.2	31.2			31.2	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.4	1.4	1.4	1.6	1.6			1.6	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					4.2	4.2		4.2			4.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0				
Flash Dont Walk (s)				11.0	11.0	11.0	11.0	11.0				
Pedestrian Calls (#/hr)				0	0	0	0	0				
Act Effct Green (s)					39.8	39.8		31.8			31.8	
Actuated g/C Ratio					0.50	0.50		0.40			0.40	
v/c Ratio					0.85	0.03		0.34			0.11	
Control Delay					11.8	0.8		11.7			13.5	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					11.8	0.8		11.7			13.5	
LOS					B	A		B			B	
Approach Delay					11.7			11.7			13.5	
Approach LOS					B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 5 (6%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 11.7		Intersection LOS: B	
Intersection Capacity Utilization 61.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 15: Trinity St & Commerce St



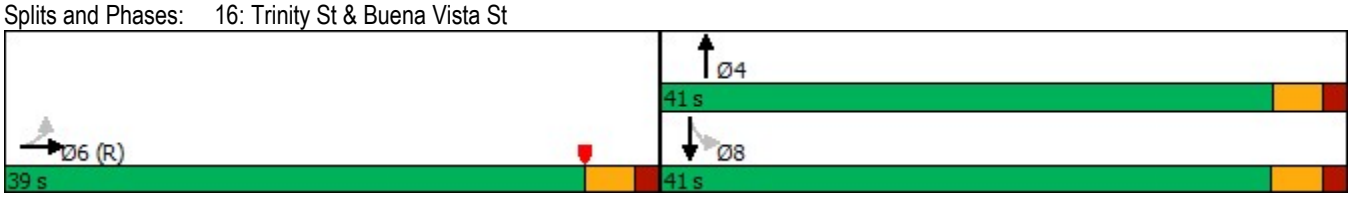


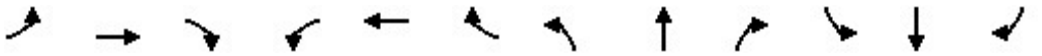
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	497	64	0	0	0	0	103	23	13	85	0
Future Volume (vph)	9	497	64	0	0	0	0	103	23	13	85	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		130	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99										
Frt		0.983						0.975				
Flt Protected	0.950										0.993	
Satd. Flow (prot)	1770	1820	0	0	0	0	0	1816	0	0	1850	0
Flt Permitted	0.950										0.888	
Satd. Flow (perm)	1770	1820	0	0	0	0	0	1816	0	0	1654	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10						19				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1448			1104			389			394	
Travel Time (s)		32.9			25.1			8.8			9.0	
Confl. Peds. (#/hr)			30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	11	616	79	0	0	0	0	128	29	16	105	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	695	0	0	0	0	0	157	0	0	121	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	0	100						100		0	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	0	6						6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.2		6.0	6.0	
Minimum Split (s)	15.1	15.1						10.7		10.7	10.7	
Total Split (s)	39.0	39.0						41.0		41.0	41.0	
Total Split (%)	48.8%	48.8%						51.3%		51.3%	51.3%	
Maximum Green (s)	34.5	34.5						36.5		36.3	36.3	
Yellow Time (s)	3.0	3.0						3.0		3.2	3.2	
All-Red Time (s)	1.5	1.5						1.5		1.5	1.5	
Lost Time Adjust (s)	-0.9	-0.9						-0.6			-0.6	
Total Lost Time (s)	3.6	3.6						3.9			4.1	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	C-Max	C-Max						None		None	None	
Act Effct Green (s)	61.9	61.9						10.6			10.4	
Actuated g/C Ratio	0.77	0.77						0.13			0.13	
v/c Ratio	0.01	0.49						0.61			0.56	
Control Delay	1.4	2.8						38.3			36.9	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay	1.4	2.8						38.3			36.9	
LOS	A	A						D			D	
Approach Delay		2.7						38.3			36.9	
Approach LOS		A						D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 20 (25%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 12.6		Intersection LOS: B	
Intersection Capacity Utilization 58.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 16: Trinity St & Buena Vista St



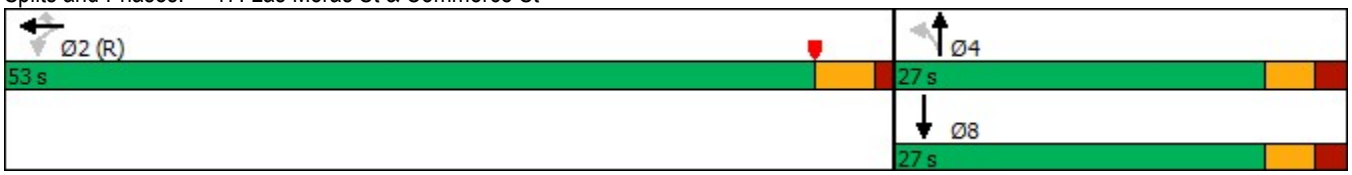


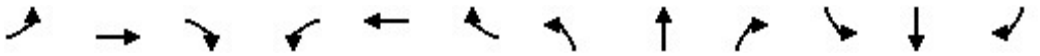
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	15	1242	14	14	4	0	0	15	9
Future Volume (vph)	0	0	0	15	1242	14	14	4	0	0	15	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	130		0	0		0
Storage Lanes	0		0	0		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.949	
Flt Protected					0.999		0.950					
Satd. Flow (prot)	0	0	0	0	3536	1583	1770	1863	0	0	1768	0
Flt Permitted					0.999		0.738					
Satd. Flow (perm)	0	0	0	0	3536	1583	1375	1863	0	0	1768	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						27					11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1095			1083			394			323	
Travel Time (s)		24.9			24.6			9.0			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	18	1499	17	17	5	0	0	18	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1517	17	17	5	0	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				14.8	14.8	14.8	11.0	11.0			11.0	
Total Split (s)				53.0	53.0	53.0	27.0	27.0			27.0	
Total Split (%)				66.3%	66.3%	66.3%	33.8%	33.8%			33.8%	
Maximum Green (s)				48.2	48.2	48.2	22.0	22.0			22.0	
Yellow Time (s)				3.6	3.6	3.6	3.0	3.0			3.0	
All-Red Time (s)				1.2	1.2	1.2	2.0	2.0			2.0	
Lost Time Adjust (s)					-0.6	-0.6	-0.6	-0.6			-0.6	
Total Lost Time (s)					4.2	4.2	4.4	4.4			4.4	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Act Effct Green (s)					48.8	48.8	22.6	22.6			22.6	
Actuated g/C Ratio					0.61	0.61	0.28	0.28			0.28	
v/c Ratio					0.70	0.02	0.04	0.01			0.06	
Control Delay					12.9	1.8	22.8	22.2			15.7	
Queue Delay					0.0	0.0	0.0	0.0			0.0	
Total Delay					12.9	1.8	22.8	22.2			15.7	
LOS					B	A	C	C			B	
Approach Delay					12.8			22.6			15.7	
Approach LOS					B			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 70 (88%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 13.0		Intersection LOS: B	
Intersection Capacity Utilization 53.3%		ICU Level of Service A	
Analysis Period (min) 15			

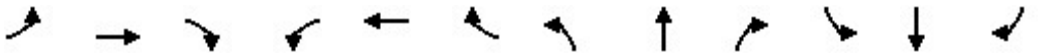
Splits and Phases: 17: Las Moras St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	541	6	0	0	0	0	7	11	13	5	0
Future Volume (vph)	5	541	6	0	0	0	0	7	11	13	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998						0.918				
Flt Protected											0.965	
Satd. Flow (prot)	0	3532	0	0	0	0	0	1710	0	0	1798	0
Flt Permitted											0.965	
Satd. Flow (perm)	0	3532	0	0	0	0	0	1710	0	0	1798	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1104			583			267			394	
Travel Time (s)		25.1			13.3			6.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	6	670	7	0	0	0	0	9	14	16	6	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	683	0	0	0	0	0	23	0	0	22	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.9%		ICU Level of Service A	
Analysis Period (min) 15			



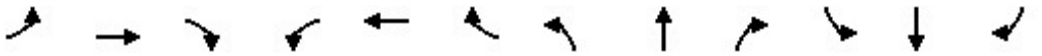
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	108	1049	61	53	325	0	0	256	162
Future Volume (vph)	0	0	0	108	1049	61	53	325	0	0	256	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor					0.99	0.95						
Frt						0.850					0.942	
Flt Protected					0.995			0.993				
Satd. Flow (prot)	0	0	0	0	3522	1583	0	3514	0	0	3334	0
Flt Permitted					0.995			0.787				
Satd. Flow (perm)	0	0	0	0	3495	1503	0	2785	0	0	3334	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						74					56	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1083			418			390			320	
Travel Time (s)		24.6			9.5			8.9			7.3	
Confl. Peds. (#/hr)				60		30						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	130	1266	74	64	392	0	0	309	195
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1396	74	0	456	0	0	504	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				0	100	20	0	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				0	6	20	0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2		2	4					
Detector Phase				2	2	2	4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	6.0			6.0	
Minimum Split (s)				25.0	25.0	25.0	20.6	20.6			20.6	
Total Split (s)				49.0	49.0	49.0	26.0	26.0			26.0	
Total Split (%)				65.3%	65.3%	65.3%	34.7%	34.7%			34.7%	
Maximum Green (s)				44.2	44.2	44.2	21.4	21.4			21.4	
Yellow Time (s)				3.6	3.6	3.6	3.2	3.2			3.2	
All-Red Time (s)				1.2	1.2	1.2	1.4	1.4			1.4	
Lost Time Adjust (s)					-0.8	-0.8		-0.6			-0.6	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0	1.0	1.0			1.0	
Recall Mode				C-Max	C-Max	C-Max	Max	Max			Max	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)				10.0	10.0	10.0	9.0	9.0			9.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)					45.0	45.0		22.0			22.0	
Actuated g/C Ratio					0.60	0.60		0.29			0.29	
v/c Ratio					0.67	0.08		0.56			0.50	
Control Delay					12.0	2.0		22.2			21.3	
Queue Delay					0.0	0.0		0.0			0.0	
Total Delay					12.0	2.0		22.2			21.3	
LOS					B	A		C			C	
Approach Delay					11.5			22.2			21.3	
Approach LOS					B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 15.5		Intersection LOS: B	
Intersection Capacity Utilization 71.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 19: Colorado St & Commerce St





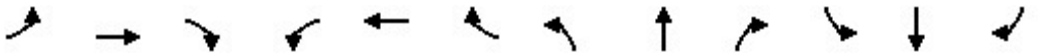
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	413	31	0	0	0	0	170	47	42	289	0
Future Volume (vph)	116	413	31	0	0	0	0	170	47	42	289	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		130	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00
Ped Bike Factor	0.93	1.00										
Frt		0.990						0.968				
Flt Protected	0.950										0.994	
Satd. Flow (prot)	1770	1838	0	0	0	0	0	3426	0	0	3518	0
Flt Permitted	0.950										0.882	
Satd. Flow (perm)	1637	1838	0	0	0	0	0	3426	0	0	3122	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7						54				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		493			423			473			390	
Travel Time (s)		11.2			9.6			10.8			8.9	
Confl. Peds. (#/hr)	60		30									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	144	512	38	0	0	0	0	211	58	52	358	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	144	550	0	0	0	0	0	269	0	0	410	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	0	100						100		0	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	0	6						6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6									8		
Detector Phase	6	6						4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0						6.0		6.0	6.0	
Minimum Split (s)	25.0	25.0						20.6		20.6	20.6	
Total Split (s)	42.0	42.0						33.0		33.0	33.0	
Total Split (%)	56.0%	56.0%						44.0%		44.0%	44.0%	
Maximum Green (s)	37.2	37.2						28.4		28.4	28.4	
Yellow Time (s)	3.6	3.6						3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2						1.4		1.4	1.4	
Lost Time Adjust (s)	-0.8	-0.8						-0.6			-0.6	
Total Lost Time (s)	4.0	4.0						4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0		1.0	1.0	
Recall Mode	C-Max	C-Max						Max		Max	Max	
Walk Time (s)	7.0	7.0						7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0						9.0		9.0	9.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)	38.0	38.0						29.0			29.0	
Actuated g/C Ratio	0.51	0.51						0.39			0.39	
v/c Ratio	0.17	0.59						0.20			0.34	
Control Delay	10.7	16.1						12.6			9.7	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay	10.7	16.1						12.6			9.7	
LOS	B	B						B			A	
Approach Delay		15.0						12.6			9.7	
Approach LOS		B						B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2: and 6:EBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 12.9		Intersection LOS: B	
Intersection Capacity Utilization 54.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 20: Colorado St & Buena Vista St



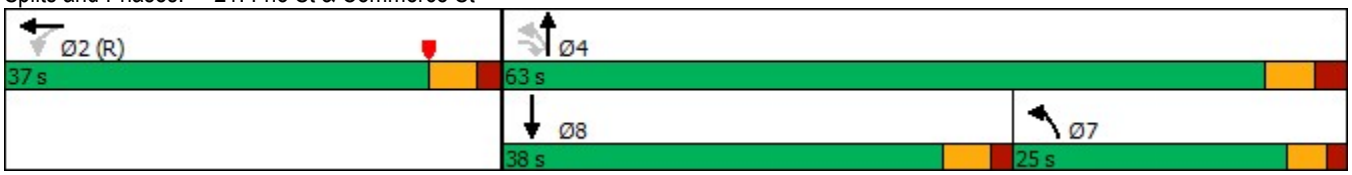


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	62	42	966	38	304	550	0	0	441	317
Future Volume (vph)	0	0	62	42	966	38	304	550	0	0	441	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	105		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.865		0.995						0.937	
Flt Protected					0.998		0.950					
Satd. Flow (prot)	0	0	1611	0	5050	0	1770	3539	0	0	3316	0
Flt Permitted					0.998		0.116					
Satd. Flow (perm)	0	0	1611	0	5050	0	216	3539	0	0	3316	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			895		6						69	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1768			501			387			300	
Travel Time (s)		40.2			11.4			8.8			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	75	51	1166	46	367	664	0	0	532	382
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	75	0	1263	0	367	664	0	0	914	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors			1	1	2		1	2			2	
Detector Template			Right	Left	Thru		Left	Thru			Thru	
Leading Detector (ft)			20	20	100		20	100			100	
Trailing Detector (ft)			0	0	0		0	0			0	
Detector 1 Position(ft)			0	0	0		0	0			0	
Detector 1 Size(ft)			20	20	6		20	6			6	
Detector 1 Type			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)			0.0	0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)			0.0	0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)			0.0	0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type			Perm	Perm	NA		pm+pt	NA			NA	
Protected Phases					2		7	4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			4	2			4					
Detector Phase			4	2	2		7	4			8	
Switch Phase												
Minimum Initial (s)			9.1	10.0	10.0		3.0	9.1			9.1	
Minimum Split (s)			15.3	15.5	15.5		8.2	15.3			15.2	
Total Split (s)			63.0	37.0	37.0		25.0	63.0			38.0	
Total Split (%)			63.0%	37.0%	37.0%		25.0%	63.0%			38.0%	
Maximum Green (s)			56.8	31.5	31.5		20.4	56.8			32.8	
Yellow Time (s)			3.6	3.6	3.6		3.0	3.6			3.6	
All-Red Time (s)			2.6	1.9	1.9		1.6	2.6			1.6	
Lost Time Adjust (s)			0.0		-1.3		-1.0	-2.1			-2.1	
Total Lost Time (s)			6.2		4.2		3.6	4.1			3.1	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?												
Vehicle Extension (s)			1.0	1.0	1.0		1.0	1.0			1.0	
Recall Mode			None	C-Min	C-Min		None	None			None	
Act Effct Green (s)			52.3		37.3		54.9	54.4			31.3	
Actuated g/C Ratio			0.52		0.37		0.55	0.54			0.31	
v/c Ratio			0.06		0.67		0.84	0.35			0.84	
Control Delay			0.1		30.2		42.4	11.2			37.3	
Queue Delay			0.0		0.0		0.0	0.2			0.0	
Total Delay			0.1		30.2		42.4	11.4			37.3	
LOS			A		C		D	B			D	
Approach Delay		0.1			30.2			22.5			37.3	
Approach LOS		A			C			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 29.1		Intersection LOS: C	
Intersection Capacity Utilization 76.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 21: Frio St & Commerce St



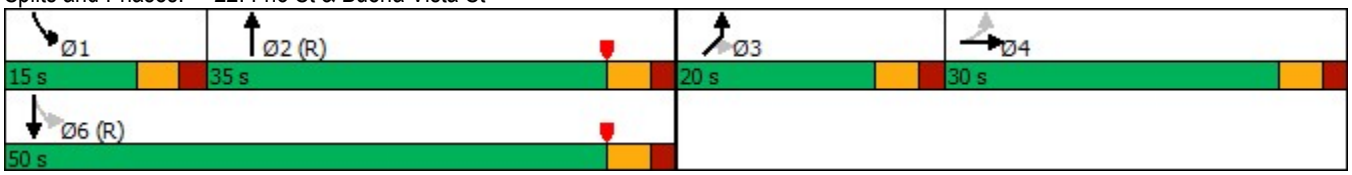


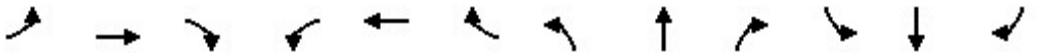
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	SBR2	NEL	NER	NER2
Lane Configurations											
Traffic Volume (vph)	57	227	123	522	43	39	363	73	144	4	4
Future Volume (vph)	57	227	123	522	43	39	363	73	144	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150		0	100			0	0	
Storage Lanes	0		0		0	1			1	1	
Taper Length (ft)	25					25			25		
Lane Util. Factor	0.91	0.91	0.91	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.955		0.989			0.975		0.999	0.850	
Flt Protected		0.993				0.950			0.953		
Satd. Flow (prot)	0	4822	0	3500	0	1770	3451	0	1773	1504	0
Flt Permitted		0.993				0.254			0.953		
Satd. Flow (perm)	0	4822	0	3500	0	473	3451	0	1773	1504	0
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)				9			81			137	
Link Speed (mph)		30		30			30		30		
Link Distance (ft)		1752		398			387		431		
Travel Time (s)		39.8		9.0			8.8		9.8		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	74	296	160	681	56	51	473	95	188	5	5
Shared Lane Traffic (%)										10%	
Lane Group Flow (vph)	0	530	0	737	0	51	568	0	189	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Right	Right
Median Width(ft)		0		12			12		12		
Link Offset(ft)		0		0			0		0		
Crosswalk Width(ft)		16		16			16		16		
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9		9	15		9	15	9	9
Number of Detectors	1	2		2		1	2		1	1	
Detector Template	Left	Thru		Thru		Left	Thru		Left		
Leading Detector (ft)	20	100		100		20	100		20	0	
Trailing Detector (ft)	0	0		0		0	0		0	0	
Detector 1 Position(ft)	0	0		0		0	0		0	0	
Detector 1 Size(ft)	20	6		6		20	6		20	0	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel											
Detector 1 Extend (s)	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94		94			94				
Detector 2 Size(ft)		6		6			6				
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)		0.0		0.0			0.0				
Turn Type	Perm	NA		NA		pm+pt	NA		Prot	Perm	
Protected Phases		4		2		1	6		3		

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	SBR2	NEL	NER	NER2
Permitted Phases	4					6				3	
Detector Phase	4	4		2		1	6		3	3	
Switch Phase											
Minimum Initial (s)	15.0	15.0		10.0		3.0	10.0		3.0	3.0	
Minimum Split (s)	24.2	24.2		25.2		8.2	38.2		8.4	8.4	
Total Split (s)	30.0	30.0		35.0		15.0	50.0		20.0	20.0	
Total Split (%)	30.0%	30.0%		35.0%		15.0%	50.0%		20.0%	20.0%	
Maximum Green (s)	24.8	24.8		29.8		9.8	44.8		14.8	14.8	
Yellow Time (s)	3.2	3.2		3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	2.0	2.0		2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-1.3		-2.1		-0.4	-2.1		0.0	0.0	
Total Lost Time (s)		3.9		3.1		4.8	3.1		5.2	5.2	
Lead/Lag	Lag	Lag		Lag		Lead			Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes		Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0		1.0	2.0		0.2	0.2	
Recall Mode	None	None		C-Min		None	C-Min		None	None	
Walk Time (s)	7.0	7.0		7.0			7.0				
Flash Dont Walk (s)	12.0	12.0		13.0			26.0				
Pedestrian Calls (#/hr)	0	0		0			0				
Act Effct Green (s)		17.9		48.7		55.4	57.1		12.8	12.8	
Actuated g/C Ratio		0.18		0.49		0.55	0.57		0.13	0.13	
v/c Ratio		0.62		0.43		0.15	0.28		0.83	0.03	
Control Delay		41.0		19.0		5.9	4.1		71.2	0.1	
Queue Delay		0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		41.0		19.0		5.9	4.1		71.2	0.1	
LOS		D		B		A	A		E	A	
Approach Delay		41.0		19.0			4.3		67.9		
Approach LOS		D		B			A		E		

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 24.9		Intersection LOS: C	
Intersection Capacity Utilization 59.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 22: Frio St & Buena Vista St



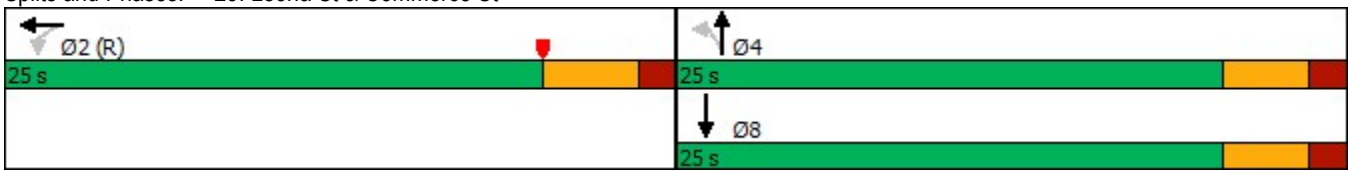


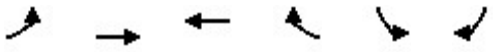
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	820	10	9	6	0	0	5	33
Future Volume (vph)	0	0	0	17	820	10	9	6	0	0	5	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	142		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.99							
Frt					0.998						0.883	
Flt Protected					0.999			0.970				
Satd. Flow (prot)	0	0	0	0	5070	0	0	1807	0	0	1645	0
Flt Permitted					0.999			0.806				
Satd. Flow (perm)	0	0	0	0	5043	0	0	1501	0	0	1645	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4						40	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		501			391			382			320	
Travel Time (s)		11.4			8.9			8.7			7.3	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	21	989	12	11	7	0	0	6	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1022	0	0	18	0	0	46	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			4			8	
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0		6.0	6.0			6.0	
Minimum Split (s)				24.0	24.0		23.7	23.7			23.7	
Total Split (s)				25.0	25.0		25.0	25.0			25.0	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				20.0	20.0		20.3	20.3			20.3	
Yellow Time (s)				3.6	3.6		3.2	3.2			3.2	
All-Red Time (s)				1.4	1.4		1.5	1.5			1.5	
Lost Time Adjust (s)					-1.0			-0.7			-0.7	
Total Lost Time (s)					4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				C-Min	C-Min		Min	Min			Min	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				12.0	12.0		12.0	12.0			12.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					35.3			6.7			6.7	
Actuated g/C Ratio					0.71			0.13			0.13	
v/c Ratio					0.29			0.09			0.18	
Control Delay					1.9			22.8			10.8	
Queue Delay					0.0			0.0			0.0	
Total Delay					1.9			22.8			10.8	
LOS					A			C			B	
Approach Delay					1.9			22.8			10.8	
Approach LOS					A			C			B	

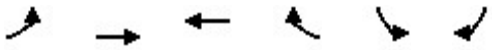
Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 45 (90%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay: 2.6		Intersection LOS: A	
Intersection Capacity Utilization 32.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 23: Leona St & Commerce St





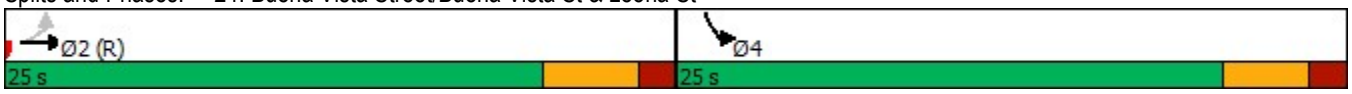
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	13	582	0	0	8	0
Future Volume (vph)	13	582	0	0	8	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.999			0.950	
Satd. Flow (prot)	0	5080	0	0	1770	0
Flt Permitted		0.999			0.950	
Satd. Flow (perm)	0	5080	0	0	1770	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						
Link Speed (mph)		30	30		30	
Link Distance (ft)		497	413		382	
Travel Time (s)		11.3	9.4		8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	17	759	0	0	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	776	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2			1	
Detector Template	Left	Thru			Left	
Leading Detector (ft)	20	100			20	
Trailing Detector (ft)	0	0			0	
Detector 1 Position(ft)	0	0			0	
Detector 1 Size(ft)	20	6			20	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	
Detector 2 Position(ft)		94				
Detector 2 Size(ft)		6				
Detector 2 Type		Cl+Ex				
Detector 2 Channel						
Detector 2 Extend (s)		0.0				
Turn Type	Perm	NA			Prot	
Protected Phases		2			4	
Permitted Phases	2					
Detector Phase	2	2			4	
Switch Phase						

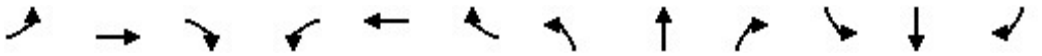


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)	8.0	8.0			6.0	
Minimum Split (s)	13.0	13.0			13.0	
Total Split (s)	25.0	25.0			25.0	
Total Split (%)	50.0%	50.0%			50.0%	
Maximum Green (s)	20.0	20.0			20.3	
Yellow Time (s)	3.6	3.6			3.2	
All-Red Time (s)	1.4	1.4			1.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		5.0			4.7	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0	2.0			1.0	
Recall Mode	C-Min	C-Min			None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			13.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effct Green (s)		46.9			6.0	
Actuated g/C Ratio		0.94			0.12	
v/c Ratio		0.16			0.05	
Control Delay		1.5			19.7	
Queue Delay		0.0			0.0	
Total Delay		1.5			19.7	
LOS		A			B	
Approach Delay		1.5			19.7	
Approach LOS		A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 20 (40%), Referenced to phase 2:EBTL and 6:, Start of Green			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.16			
Intersection Signal Delay: 1.7		Intersection LOS: A	
Intersection Capacity Utilization 26.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Buena Vista Street/Buena Vista St & Leona St



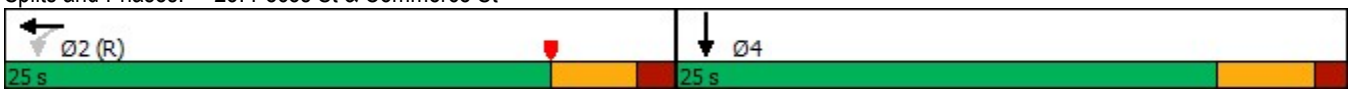


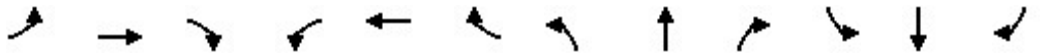
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	259	505	0	0	0	0	0	940	259
Future Volume (vph)	0	0	0	259	505	0	0	0	0	0	940	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Frt											0.968	
Flt Protected					0.983							
Satd. Flow (prot)	0	0	0	0	4999	0	0	0	0	0	4923	0
Flt Permitted					0.983							
Satd. Flow (perm)	0	0	0	0	4999	0	0	0	0	0	4923	0
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)											162	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		391			387			408			325	
Travel Time (s)		8.9			8.8			9.3			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	312	609	0	0	0	0	0	1134	312
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	921	0	0	0	0	0	1446	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	
Detector Template				Left	Thru						Thru	
Leading Detector (ft)				20	100						100	
Trailing Detector (ft)				0	0						0	
Detector 1 Position(ft)				0	0						0	
Detector 1 Size(ft)				20	6						6	
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	
Detector 1 Queue (s)				0.0	0.0						0.0	
Detector 1 Delay (s)				0.0	0.0						0.0	
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	
Protected Phases					2						4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2								
Detector Phase				2	2						4	
Switch Phase												
Minimum Initial (s)				10.0	10.0						10.0	
Minimum Split (s)				24.7	24.7						23.9	
Total Split (s)				25.0	25.0						25.0	
Total Split (%)				50.0%	50.0%						50.0%	
Maximum Green (s)				20.3	20.3						20.1	
Yellow Time (s)				3.2	3.2						3.6	
All-Red Time (s)				1.5	1.5						1.3	
Lost Time Adjust (s)					-0.7						-0.9	
Total Lost Time (s)					4.0						4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0						1.0	
Recall Mode				C-Min	C-Min						Min	
Walk Time (s)				7.0	7.0						7.0	
Flash Dont Walk (s)				13.0	13.0						12.0	
Pedestrian Calls (#/hr)				0	0						0	
Act Effct Green (s)					22.5						19.5	
Actuated g/C Ratio					0.45						0.39	
v/c Ratio					0.41						0.72	
Control Delay					10.8						13.2	
Queue Delay					0.0						0.0	
Total Delay					10.8						13.2	
LOS					B						B	
Approach Delay					10.8						13.2	
Approach LOS					B						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 40 (80%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 12.2		Intersection LOS: B	
Intersection Capacity Utilization 49.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 25: Pecos St & Commerce St





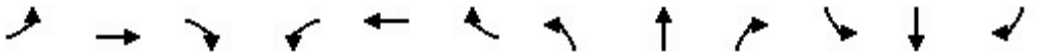
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	482	230	0	0	0	0	0	0	132	949	0
Future Volume (vph)	0	482	230	0	0	0	0	0	0	132	949	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	1.00
Frt		0.952										
Flt Protected											0.994	
Satd. Flow (prot)	0	4841	0	0	0	0	0	0	0	0	6369	0
Flt Permitted											0.994	
Satd. Flow (perm)	0	4841	0	0	0	0	0	0	0	0	6369	0
Right Turn on Red			Yes			Yes			Yes	No		Yes
Satd. Flow (RTOR)		20										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		413			388			389			408	
Travel Time (s)		9.4			8.8			8.8			9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	0	629	300	0	0	0	0	0	0	172	1238	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	929	0	0	0	0	0	0	0	0	1410	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2								1	2	
Detector Template		Thru								Left	Thru	
Leading Detector (ft)		100								0	100	
Trailing Detector (ft)		0								0	0	
Detector 1 Position(ft)		0								0	0	
Detector 1 Size(ft)		6								0	6	
Detector 1 Type		Cl+Ex								Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0								0.0	0.0	
Detector 1 Queue (s)		0.0								0.0	0.0	
Detector 1 Delay (s)		0.0								0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA								Perm	NA	
Protected Phases		4									2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases										2		
Detector Phase		4								2	2	
Switch Phase												
Minimum Initial (s)		6.0								20.0	20.0	
Minimum Split (s)		24.7								25.0	25.0	
Total Split (s)		25.0								25.0	25.0	
Total Split (%)		50.0%								50.0%	50.0%	
Maximum Green (s)		20.3								20.0	20.0	
Yellow Time (s)		3.2								3.6	3.6	
All-Red Time (s)		1.5								1.4	1.4	
Lost Time Adjust (s)		-0.7									-1.0	
Total Lost Time (s)		4.0									4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0								4.0	4.0	
Recall Mode		C-Max								Min	Min	
Walk Time (s)		7.0								7.0	7.0	
Flash Dont Walk (s)		13.0								13.0	13.0	
Pedestrian Calls (#/hr)		0								0	0	
Act Effct Green (s)		21.0									21.0	
Actuated g/C Ratio		0.42									0.42	
v/c Ratio		0.45									0.53	
Control Delay		11.3									18.4	
Queue Delay		0.0									0.0	
Total Delay		11.3									18.4	
LOS		B									B	
Approach Delay		11.3									18.4	
Approach LOS		B									B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 20 (40%), Referenced to phase 4:EBT, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 15.6		Intersection LOS: B	
Intersection Capacity Utilization 42.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 26: Buena Vista St/Dolorosa St & Pecos St



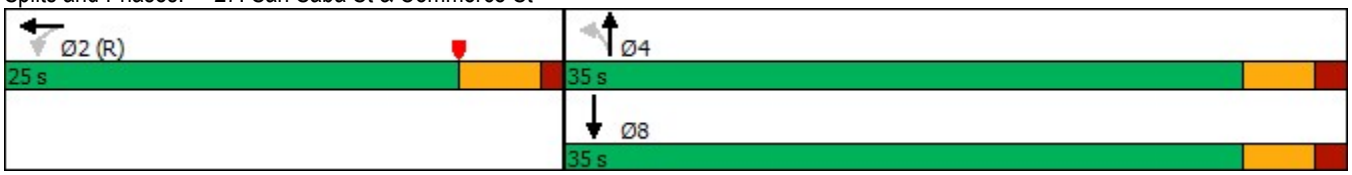


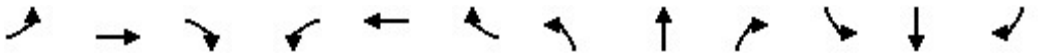
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	745	172	32	146	0	0	0	0
Future Volume (vph)	0	0	0	0	745	172	32	146	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.972							
Flt Protected								0.991				
Satd. Flow (prot)	0	0	0	0	4943	0	0	1846	0	0	1863	0
Flt Permitted								0.950				
Satd. Flow (perm)	0	0	0	0	4943	0	0	1770	0	0	1863	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		387			563			409			325	
Travel Time (s)		8.8			12.8			9.3			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	0	899	208	39	176	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1107	0	0	215	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			1	
Detector Template					Thru		Left	Thru				
Leading Detector (ft)				0	100		0	100			0	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				0	6		0	6			0	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA		Perm	NA				
Protected Phases					2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2			4					
Detector Phase				2	2		4	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0		5.0	5.0			5.0	
Minimum Split (s)				14.7	14.7		9.7	9.7			9.7	
Total Split (s)				25.0	25.0		35.0	35.0			35.0	
Total Split (%)				41.7%	41.7%		58.3%	58.3%			58.3%	
Maximum Green (s)				20.3	20.3		30.3	30.3			30.3	
Yellow Time (s)				3.6	3.6		3.2	3.2			3.2	
All-Red Time (s)				1.1	1.1		1.5	1.5			1.5	
Lost Time Adjust (s)					-2.0			-1.7			0.0	
Total Lost Time (s)					2.7			3.0			4.7	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0			3.0	
Recall Mode				C-Min	C-Min		None	None			None	
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				9.0	9.0		14.0	14.0			14.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)					41.6			12.7				
Actuated g/C Ratio					0.69			0.21				
v/c Ratio					0.32			0.57				
Control Delay					4.4			26.7				
Queue Delay					0.0			0.0				
Total Delay					4.4			26.7				
LOS					A			C				
Approach Delay					4.4			26.7				
Approach LOS					A			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 47 (78%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 8.1		Intersection LOS: A	
Intersection Capacity Utilization 37.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 27: San Saba St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	638	2	0	0	0	0	1	10	0	0	0
Future Volume (vph)	65	638	2	0	0	0	0	1	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	104		101	0		0	0		0	0		0
Storage Lanes	1		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.51									
Frt			0.850					0.875				
Flt Protected	0.950											
Satd. Flow (prot)	1770	5085	1583	0	0	0	0	1630	0	0	1863	0
Flt Permitted	0.950											
Satd. Flow (perm)	1770	5085	813	0	0	0	0	1630	0	0	1863	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			24					13				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		388			565			393			409	
Travel Time (s)		8.8			12.8			8.9			9.3	
Confl. Peds. (#/hr)			200									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	85	832	3	0	0	0	0	1	13	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	832	3	0	0	0	0	14	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	1	
Detector Template	Left	Thru	Right					Thru				
Leading Detector (ft)	20	100	20					100		0	0	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		0	0	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0				

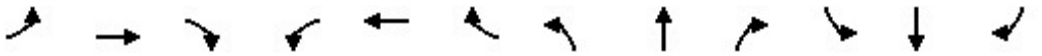
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Split	NA	Perm					NA				
Protected Phases	2	2						4			8	
Permitted Phases			2							8		
Detector Phase	2	2	2					4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					5.0		5.0	5.0	
Minimum Split (s)	26.0	26.0	26.0					30.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0					40.0		40.0	40.0	
Total Split (%)	60.0%	60.0%	60.0%					40.0%		40.0%	40.0%	
Maximum Green (s)	55.0	55.0	55.0					34.8		34.8	34.8	
Yellow Time (s)	3.2	3.2	3.2					3.2		3.2	3.2	
All-Red Time (s)	1.8	1.8	1.8					2.0		2.0	2.0	
Lost Time Adjust (s)	-0.6	-0.6	-0.6					-0.6			0.0	
Total Lost Time (s)	4.4	4.4	4.4					4.6			5.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	C-Min	C-Min	C-Min					None		None	None	
Walk Time (s)	7.0	7.0	7.0					7.0				
Flash Dont Walk (s)	14.0	14.0	14.0					17.0				
Pedestrian Calls (#/hr)	0	0	0					0				
Act Effct Green (s)	94.1	94.1	94.1					5.7				
Actuated g/C Ratio	0.94	0.94	0.94					0.06				
v/c Ratio	0.05	0.17	0.00					0.13				
Control Delay	0.6	0.5	0.0					26.0				
Queue Delay	0.0	0.0	0.0					0.0				
Total Delay	0.6	0.5	0.0					26.0				
LOS	A	A	A					C				
Approach Delay		0.5						26.0				
Approach LOS		A						C				

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 80 (80%), Referenced to phase 2:EBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.17
Intersection Signal Delay: 0.9 Intersection LOS: A
Intersection Capacity Utilization 29.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 28: San Saba St & Dolorosa St



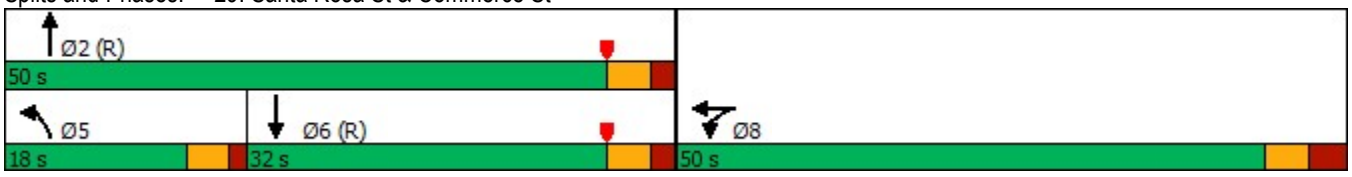


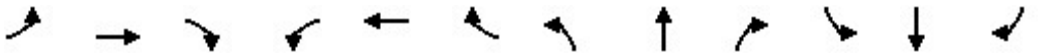
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	83	563	98	185	477	0	0	391	135
Future Volume (vph)	0	0	0	83	563	98	185	477	0	0	391	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		100	0		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.95	1.00	1.00	0.95	0.95
Frt					0.980						0.961	
Flt Protected					0.994		0.950					
Satd. Flow (prot)	0	0	0	0	4954	0	1770	3539	0	0	3401	0
Flt Permitted					0.994		0.950					
Satd. Flow (perm)	0	0	0	0	4954	0	1770	3539	0	0	3401	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					37						48	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			416			374			398	
Travel Time (s)		12.8			9.5			8.5			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	100	679	118	223	576	0	0	472	163
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	897	0	223	576	0	0	635	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			36			36	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases												
Detector Phase				8	8		5	2			6	
Switch Phase												
Minimum Initial (s)				5.0	5.0		3.0	10.0			10.0	
Minimum Split (s)				43.2	43.2		7.4	28.2			29.2	
Total Split (s)				50.0	50.0		18.0	50.0			32.0	
Total Split (%)				50.0%	50.0%		18.0%	50.0%			32.0%	
Maximum Green (s)				43.8	43.8		13.6	44.8			26.8	
Yellow Time (s)				3.2	3.2		3.0	3.2			3.2	
All-Red Time (s)				3.0	3.0		1.4	2.0			2.0	
Lost Time Adjust (s)					-2.2		-0.4	-1.2			-1.2	
Total Lost Time (s)					4.0		4.0	4.0			4.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				Max	Max		Max	C-Max			C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				30.0	30.0			16.0			17.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)					46.0		14.0	46.0			28.0	
Actuated g/C Ratio					0.46		0.14	0.46			0.28	
v/c Ratio					0.39		0.90	0.35			0.64	
Control Delay					11.7		72.4	37.2			32.6	
Queue Delay					0.0		0.0	1.3			0.0	
Total Delay					11.7		72.4	38.4			32.6	
LOS					B		E	D			C	
Approach Delay					11.7			47.9			32.6	
Approach LOS					B			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 29.8		Intersection LOS: C	
Intersection Capacity Utilization 54.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 29: Santa Rosa St & Commerce St



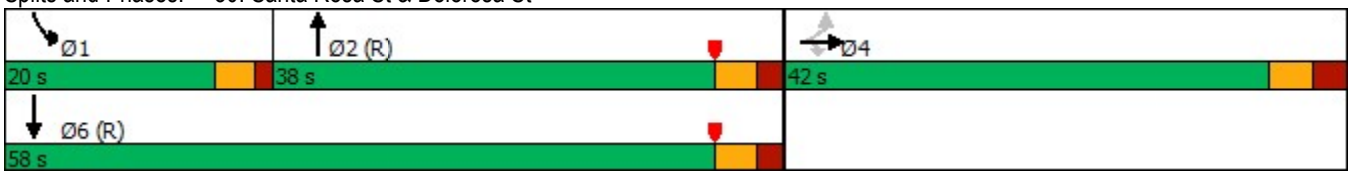


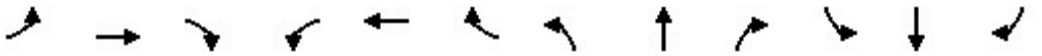
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	464	85	0	0	0	0	631	99	94	598	0
Future Volume (vph)	99	464	85	0	0	0	0	631	99	94	598	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	0		0	0		0	127		0
Storage Lanes	1		1	0		0	0		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.97	0.95	1.00
Frt			0.850					0.980				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	5085	1583	0	0	0	0	4984	0	3433	3539	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	5085	1583	0	0	0	0	4984	0	3433	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			111					32				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		565			424			416			374	
Travel Time (s)		12.8			9.6			9.5			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	129	605	111	0	0	0	0	823	129	123	780	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	129	605	111	0	0	0	0	952	0	123	780	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	20	100	20					100		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	20	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		4						2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4									
Detector Phase	4	4	4					2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0					10.0		3.0	10.0	
Minimum Split (s)	37.9	37.9	37.9					25.2		7.4	29.2	
Total Split (s)	42.0	42.0	42.0					38.0		20.0	58.0	
Total Split (%)	42.0%	42.0%	42.0%					38.0%		20.0%	58.0%	
Maximum Green (s)	36.1	36.1	36.1					32.8		15.6	52.8	
Yellow Time (s)	3.2	3.2	3.2					3.2		3.0	3.2	
All-Red Time (s)	2.7	2.7	2.7					2.0		1.4	2.0	
Lost Time Adjust (s)	-1.9	-1.9	-1.9					-1.2		-0.4	-1.2	
Total Lost Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	Max	Max	Max					C-Max		Max	C-Max	
Walk Time (s)	7.0	7.0	7.0					7.0			7.0	
Flash Dont Walk (s)	25.0	25.0	25.0					13.0			17.0	
Pedestrian Calls (#/hr)	0	0	0					0			0	
Act Effct Green (s)	38.0	38.0	38.0					34.0		16.0	54.0	
Actuated g/C Ratio	0.38	0.38	0.38					0.34		0.16	0.54	
v/c Ratio	0.19	0.31	0.17					0.56		0.22	0.41	
Control Delay	16.4	16.4	4.0					27.4		29.4	7.7	
Queue Delay	0.0	0.0	0.0					0.0		0.0	1.0	
Total Delay	16.4	16.4	4.0					27.4		29.4	8.7	
LOS	B	B	A					C		C	A	
Approach Delay		14.8						27.4			11.5	
Approach LOS		B						C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 60 (60%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 18.1		Intersection LOS: B	
Intersection Capacity Utilization 54.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 30: Santa Rosa St & Dolorosa St



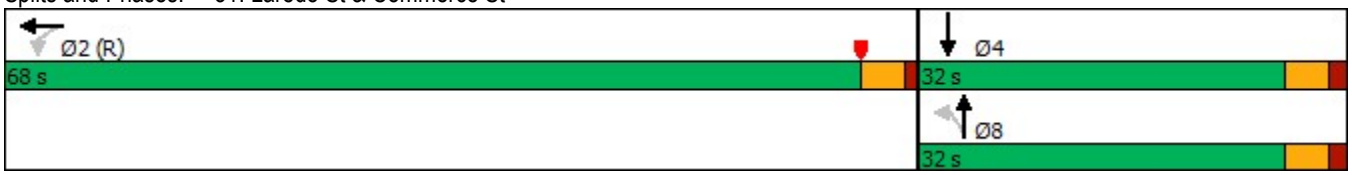


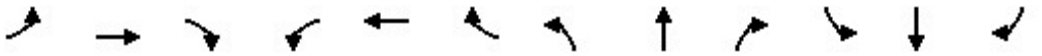
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	57	785	14	15	2	0	0	21	25
Future Volume (vph)	0	0	0	57	785	14	15	2	0	0	21	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.99							
Frt					0.998						0.926	
Flt Protected					0.997			0.957				
Satd. Flow (prot)	0	0	0	0	5060	0	0	1783	0	0	1725	0
Flt Permitted					0.997			0.825				
Satd. Flow (perm)	0	0	0	0	5007	0	0	1537	0	0	1725	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5						30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		416			396			422			525	
Travel Time (s)		9.5			9.0			9.6			11.9	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	69	947	17	18	2	0	0	25	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1033	0	0	20	0	0	55	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				0	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				0	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					2			8			4	
Permitted Phases				2			8					
Detector Phase				2	2		8	8			4	
Switch Phase												
Minimum Initial (s)				10.0	10.0		5.0	5.0			5.0	
Minimum Split (s)				14.3	14.3		9.7	9.7			9.7	
Total Split (s)				68.0	68.0		32.0	32.0			32.0	
Total Split (%)				68.0%	68.0%		32.0%	32.0%			32.0%	
Maximum Green (s)				63.7	63.7		27.3	27.3			27.3	
Yellow Time (s)				3.2	3.2		3.2	3.2			3.2	
All-Red Time (s)				1.1	1.1		1.5	1.5			1.5	
Lost Time Adjust (s)					-0.3			0.0			-0.7	
Total Lost Time (s)					4.0			4.7			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				C-Max	C-Max		Max	Max			Max	
Act Effct Green (s)					64.0			27.3			28.0	
Actuated g/C Ratio					0.64			0.27			0.28	
v/c Ratio					0.32			0.05			0.11	
Control Delay					8.4			23.5			15.7	
Queue Delay					0.4			0.0			0.0	
Total Delay					8.8			23.5			15.7	
LOS					A			C			B	
Approach Delay					8.8			23.5			15.7	
Approach LOS					A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 65 (65%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.32			
Intersection Signal Delay: 9.4		Intersection LOS: A	
Intersection Capacity Utilization 33.4%		ICU Level of Service A	
Analysis Period (min) 15			

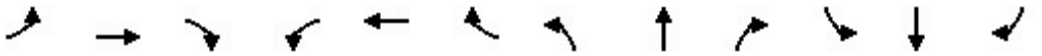
Splits and Phases: 31: Laredo St & Commerce St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	447	0	0	0	0	0	8	7	72	0	0
Future Volume (vph)	8	447	0	0	0	0	0	8	7	72	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt								0.936				
Flt Protected		0.999									0.950	
Satd. Flow (prot)	0	5080	0	0	0	0	0	1744	0	0	1770	0
Flt Permitted		0.999									0.950	
Satd. Flow (perm)	0	5080	0	0	0	0	0	1744	0	0	1770	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		424			814			299			422	
Travel Time (s)		9.6			18.5			6.8			9.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	118%	118%	100%	100%	118%	118%	118%	120%	118%	120%
Adj. Flow (vph)	10	583	0	0	0	0	0	10	9	94	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	593	0	0	0	0	0	19	0	0	94	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.7%		ICU Level of Service A	
Analysis Period (min) 15			

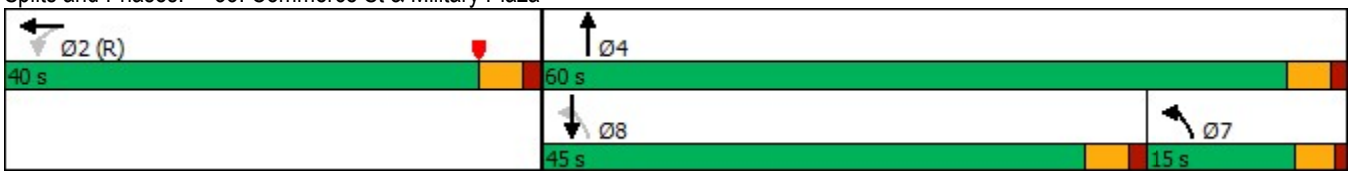


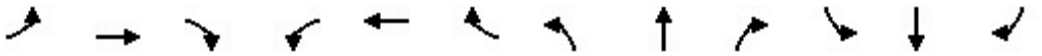
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	172	715	73	74	298	0	0	336	67
Future Volume (vph)	0	0	0	172	715	73	74	298	0	0	336	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.989						0.975	
Flt Protected					0.991			0.990				
Satd. Flow (prot)	0	0	0	0	4984	0	0	3504	0	0	3451	0
Flt Permitted					0.991			0.645				
Satd. Flow (perm)	0	0	0	0	4984	0	0	2283	0	0	3451	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					15						29	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		412			265			393			470	
Travel Time (s)		9.4			6.0			8.9			10.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	208	863	88	89	360	0	0	405	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1159	0	0	449	0	0	486	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		0	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		0	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		D.P+P	NA			NA	
Protected Phases					2		7	4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2			8					
Detector Phase				2	2		7	4			8	
Switch Phase												
Minimum Initial (s)				10.0	10.0		3.0	10.0			10.0	
Minimum Split (s)				14.7	14.7		10.4	38.0			14.6	
Total Split (s)				40.0	40.0		15.0	60.0			45.0	
Total Split (%)				40.0%	40.0%		15.0%	60.0%			45.0%	
Maximum Green (s)				35.3	35.3		11.0	55.4			40.4	
Yellow Time (s)				3.2	3.2		3.0	3.2			3.2	
All-Red Time (s)				1.5	1.5		1.0	1.4			1.4	
Lost Time Adjust (s)					-2.0			-2.0			-2.0	
Total Lost Time (s)					2.7			2.6			2.6	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0	1.0		1.0	1.0			1.0	
Recall Mode				C-Max	C-Max		Min	Min			Min	
Act Effct Green (s)					68.0			26.7			19.2	
Actuated g/C Ratio					0.68			0.27			0.19	
v/c Ratio					0.34			0.67			0.71	
Control Delay					9.1			40.2			41.0	
Queue Delay					0.4			0.0			0.0	
Total Delay					9.5			40.2			41.0	
LOS					A			D			D	
Approach Delay					9.5			40.2			41.0	
Approach LOS					A			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 60 (60%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 23.4		Intersection LOS: C	
Intersection Capacity Utilization 55.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 33: Commerce St & Military Plaza





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	416	51	0	0	0	0	315	64	92	412	0
Future Volume (vph)	59	416	51	0	0	0	0	315	64	92	412	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	152		0
Storage Lanes	1		1	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850					0.975				
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	3539	1583	0	0	0	0	3451	0	1770	3539	0
Flt Permitted	0.950									0.429		
Satd. Flow (perm)	1770	3539	1583	0	0	0	0	3451	0	799	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			116					21				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		814			454			543			393	
Travel Time (s)		18.5			10.3			12.3			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	77	543	67	0	0	0	0	411	83	120	537	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	543	67	0	0	0	0	494	0	120	537	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2		1	2	
Detector Template	Left	Thru	Right					Thru		Left	Thru	
Leading Detector (ft)	0	100	20					100		20	100	
Trailing Detector (ft)	0	0	0					0		0	0	
Detector 1 Position(ft)	0	0	0					0		0	0	
Detector 1 Size(ft)	0	6	20					6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA		D.P+P	NA	
Protected Phases		2						4		3	8	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Growth Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2							4		
Detector Phase	2	2	2					4		3	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0		3.0	10.0	
Minimum Split (s)	20.0	20.0	20.0					15.0		10.0	25.0	
Total Split (s)	29.0	29.0	29.0					24.0		17.0	41.0	
Total Split (%)	29.0%	29.0%	29.0%					24.0%		17.0%	41.0%	
Maximum Green (s)	24.0	24.0	24.0					19.2		12.8	36.2	
Yellow Time (s)	3.2	3.2	3.2					3.2		3.0	3.2	
All-Red Time (s)	1.8	1.8	1.8					1.6		1.2	1.6	
Lost Time Adjust (s)	0.0	-1.0	0.0					-0.8		-0.2	-0.8	
Total Lost Time (s)	5.0	4.0	5.0					4.0		4.0	4.0	
Lead/Lag								Lead		Lag		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	1.0	1.0	1.0					1.0		1.0	1.0	
Recall Mode	C-Max	C-Max	C-Max					Max		Max	Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	24.0	25.0	24.0					50.0		63.0	67.0	
Actuated g/C Ratio	0.24	0.25	0.24					0.50		0.63	0.67	
v/c Ratio	0.18	0.61	0.14					0.28		0.19	0.23	
Control Delay	20.0	25.4	0.9					14.4		5.6	4.7	
Queue Delay	0.0	0.0	0.0					0.0		0.0	0.0	
Total Delay	20.0	25.4	0.9					14.4		5.6	4.7	
LOS	B	C	A					B		A	A	
Approach Delay		22.4						14.4			4.9	
Approach LOS		C						B			A	

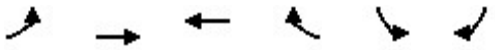
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 18 (18%), Referenced to phase 2:EBTL, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 14.0		Intersection LOS: B	
Intersection Capacity Utilization 42.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 34: Flores St & Dolorosa St

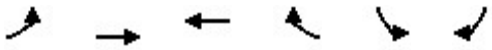


Lane Group	Ø10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	20.0
Total Split (s)	30.0
Total Split (%)	30%
Maximum Green (s)	26.0
Yellow Time (s)	3.5
All-Red Time (s)	0.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary



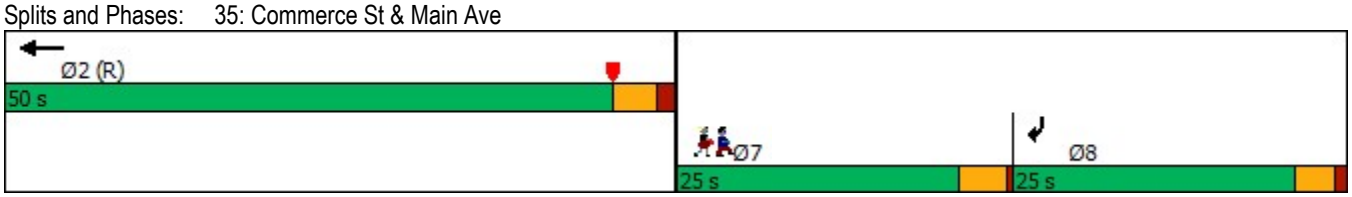
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø7
Lane Configurations							
Traffic Volume (vph)	0	0	618	4	0	301	
Future Volume (vph)	0	0	618	4	0	301	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0			150	0	0	
Storage Lanes	0			0	0	1	
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00	
Frt			0.999			0.865	
Flt Protected							
Satd. Flow (prot)	0	0	5080	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	0	0	5080	0	0	1611	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			1			437	
Link Speed (mph)		30	30		30		
Link Distance (ft)		265	234		513		
Travel Time (s)		6.0	5.3		11.7		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Growth Factor	111%	111%	111%	111%	111%	111%	
Adj. Flow (vph)	0	0	746	5	0	363	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	751	0	0	363	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		0		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors			2			1	
Detector Template			Thru			Right	
Leading Detector (ft)			100			20	
Trailing Detector (ft)			0			0	
Detector 1 Position(ft)			0			0	
Detector 1 Size(ft)			6			20	
Detector 1 Type			Cl+Ex			Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)			0.0			0.0	
Detector 1 Queue (s)			0.0			0.0	
Detector 1 Delay (s)			0.0			0.0	
Detector 2 Position(ft)			94				
Detector 2 Size(ft)			6				
Detector 2 Type			Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)			0.0				
Turn Type			NA			Prot	
Protected Phases			2			8	7



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø7
Permitted Phases							
Detector Phase			2			8	
Switch Phase							
Minimum Initial (s)			10.0			6.0	3.0
Minimum Split (s)			22.7			25.0	9.0
Total Split (s)			50.0			25.0	25.0
Total Split (%)			50.0%			25.0%	25%
Maximum Green (s)			45.3			21.0	21.0
Yellow Time (s)			3.2			3.0	3.5
All-Red Time (s)			1.5			1.0	0.5
Lost Time Adjust (s)			-1.7			-2.0	
Total Lost Time (s)			3.0			2.0	
Lead/Lag						Lag	Lead
Lead-Lag Optimize?						Yes	Yes
Vehicle Extension (s)			1.0			1.0	3.0
Recall Mode			C-Max			Max	None
Walk Time (s)			7.0			7.0	
Flash Dont Walk (s)			10.0			12.0	
Pedestrian Calls (#/hr)			0			0	
Act Effct Green (s)			47.0			48.0	
Actuated g/C Ratio			0.47			0.48	
v/c Ratio			0.31			0.36	
Control Delay			7.4			1.6	
Queue Delay			0.7			0.0	
Total Delay			8.1			1.6	
LOS			A			A	
Approach Delay			8.1		1.6		
Approach LOS			A		A		

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 20 (20%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay: 6.0		Intersection LOS: A	
Intersection Capacity Utilization 40.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 35: Commerce St & Main Ave

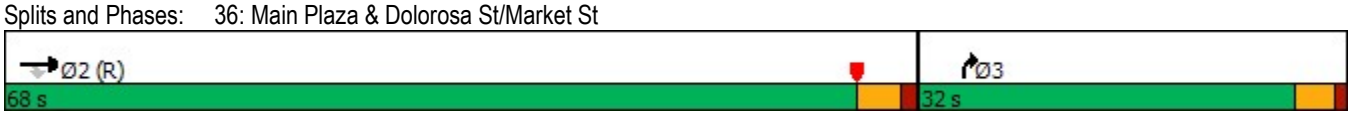


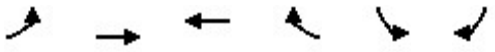
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	664	0	0	0	0	4
Future Volume (vph)	664	0	0	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	0		0	0
Storage Lanes		1	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	1863	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	1863	0	0	0	1611
Right Turn on Red		Yes				No
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	454			501	380	
Travel Time (s)	10.3			11.4	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	852	0	0	0	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	852	0	0	0	0	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1				1
Detector Template	Thru					Right
Leading Detector (ft)	100	0				20
Trailing Detector (ft)	0	0				0
Detector 1 Position(ft)	0	0				0
Detector 1 Size(ft)	6	0				20
Detector 1 Type	Cl+Ex	Cl+Ex				Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0				0.0
Detector 1 Queue (s)	0.0	0.0				0.0
Detector 1 Delay (s)	0.0	0.0				0.0
Detector 2 Position(ft)	94					
Detector 2 Size(ft)	6					
Detector 2 Type	Cl+Ex					
Detector 2 Channel						
Detector 2 Extend (s)	0.0					
Turn Type	NA	Perm				Prot
Protected Phases	2					3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases		2				
Detector Phase	2	2				3
Switch Phase						
Minimum Initial (s)	10.0	10.0				5.0
Minimum Split (s)	22.6	22.6				22.0
Total Split (s)	68.0	68.0				32.0
Total Split (%)	68.0%	68.0%				32.0%
Maximum Green (s)	63.4	63.4				28.0
Yellow Time (s)	3.2	3.2				3.0
All-Red Time (s)	1.4	1.4				1.0
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	4.6	4.6				4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0				3.0
Recall Mode	C-Max	C-Max				Max
Walk Time (s)	7.0	7.0				7.0
Flash Dont Walk (s)	11.0	11.0				11.0
Pedestrian Calls (#/hr)	0	0				0
Act Effct Green (s)	63.4					28.0
Actuated g/C Ratio	0.63					0.28
v/c Ratio	0.38					0.01
Control Delay	4.8					26.2
Queue Delay	0.1					0.0
Total Delay	4.8					26.2
LOS	A					C
Approach Delay	4.8				26.2	
Approach LOS	A				C	

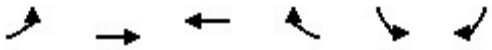
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 35 (35%), Referenced to phase 2:EBT and 6:, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 5.0		Intersection LOS: A	
Intersection Capacity Utilization 33.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 36: Main Plaza & Dolorosa St/Market St





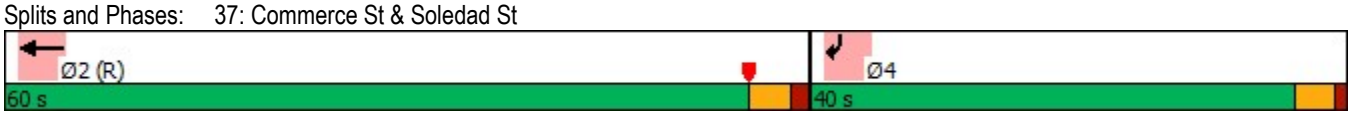
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	603	185	0	4
Future Volume (vph)	0	0	603	185	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			150	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt			0.965			0.865
Flt Protected						
Satd. Flow (prot)	0	0	4907	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	4907	0	0	1611
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			124			194
Link Speed (mph)		30	30		30	
Link Distance (ft)		234	520		565	
Travel Time (s)		5.3	11.8		12.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	728	223	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	951	0	0	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors			2			1
Detector Template			Thru			Right
Leading Detector (ft)			100			20
Trailing Detector (ft)			0			0
Detector 1 Position(ft)			0			0
Detector 1 Size(ft)			6			20
Detector 1 Type			Cl+Ex			Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)			0.0			0.0
Detector 1 Queue (s)			0.0			0.0
Detector 1 Delay (s)			0.0			0.0
Detector 2 Position(ft)			94			
Detector 2 Size(ft)			6			
Detector 2 Type			Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)			0.0			
Turn Type			NA			Prot
Protected Phases			2			4

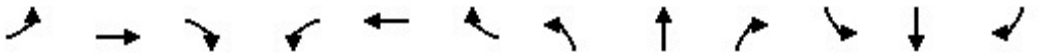


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases						
Detector Phase			2			4
Switch Phase						
Minimum Initial (s)			10.0			6.0
Minimum Split (s)			22.7			25.0
Total Split (s)			60.0			40.0
Total Split (%)			60.0%			40.0%
Maximum Green (s)			55.3			36.0
Yellow Time (s)			3.2			3.0
All-Red Time (s)			1.5			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.7			4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)			1.0			1.0
Recall Mode			C-Max			None
Walk Time (s)			7.0			7.0
Flash Dont Walk (s)			10.0			11.0
Pedestrian Calls (#/hr)			0			0
Act Effct Green (s)			97.1			6.0
Actuated g/C Ratio			0.97			0.06
v/c Ratio			0.20			0.02
Control Delay			0.2			0.2
Queue Delay			0.0			0.0
Total Delay			0.2			0.2
LOS			A			A
Approach Delay			0.2		0.2	
Approach LOS			A		A	

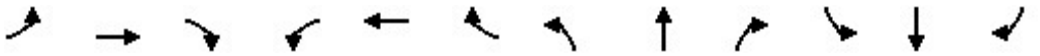
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 20 (20%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.20			
Intersection Signal Delay: 0.2		Intersection LOS: A	
Intersection Capacity Utilization 29.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 37: Commerce St & Soledad St





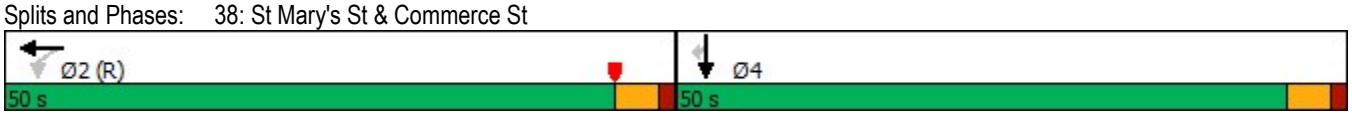
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	140	740	0	0	0	0	0	541	135
Future Volume (vph)	0	0	0	140	740	0	0	0	0	0	541	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		150
Storage Lanes	0		0	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												0.850
Flt Protected					0.992							
Satd. Flow (prot)	0	0	0	0	5045	0	0	0	0	0	3539	1583
Flt Permitted					0.992							
Satd. Flow (perm)	0	0	0	0	5045	0	0	0	0	0	3539	1583
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)												82
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		520			534			212			291	
Travel Time (s)		11.8			12.1			4.8			6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	169	893	0	0	0	0	0	653	163
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1062	0	0	0	0	0	653	163
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	1
Detector Template				Left	Thru						Thru	
Leading Detector (ft)				0	100						100	0
Trailing Detector (ft)				0	0						0	0
Detector 1 Position(ft)				0	0						0	0
Detector 1 Size(ft)				0	6						6	0
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	0.0
Detector 1 Queue (s)				0.0	0.0						0.0	0.0
Detector 1 Delay (s)				0.0	0.0						0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA						NA	Perm
Protected Phases					2						4	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				2								4
Detector Phase				2	2						4	4
Switch Phase												
Minimum Initial (s)				10.0	10.0						5.0	5.0
Minimum Split (s)				28.6	28.6						28.6	28.6
Total Split (s)				50.0	50.0						50.0	50.0
Total Split (%)				50.0%	50.0%						50.0%	50.0%
Maximum Green (s)				45.4	45.4						45.4	45.4
Yellow Time (s)				3.2	3.2						3.2	3.2
All-Red Time (s)				1.4	1.4						1.4	1.4
Lost Time Adjust (s)					-0.6						-0.6	0.0
Total Lost Time (s)					4.0						4.0	4.6
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0						1.0	1.0
Recall Mode				C-Max	C-Max						Max	Max
Walk Time (s)				7.0	7.0						7.0	7.0
Flash Dont Walk (s)				15.0	15.0						15.0	15.0
Pedestrian Calls (#/hr)				0	0						0	0
Act Effct Green (s)					46.0						46.0	45.4
Actuated g/C Ratio					0.46						0.46	0.45
v/c Ratio					0.46						0.40	0.21
Control Delay					13.5						18.8	9.1
Queue Delay					0.0						4.0	0.0
Total Delay					13.5						22.8	9.1
LOS					B						C	A
Approach Delay					13.5						20.1	
Approach LOS					B						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 9 (9%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay: 16.4		Intersection LOS: B	
Intersection Capacity Utilization 42.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 38: St Mary's St & Commerce St

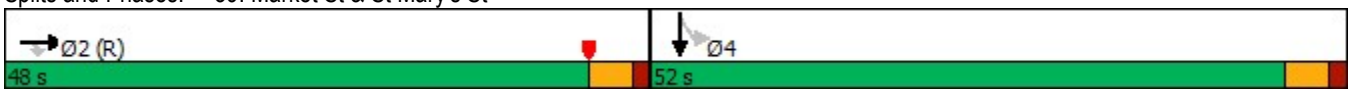


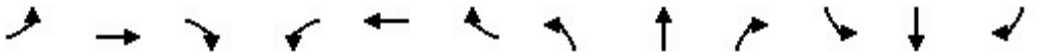
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	669	90	0	0	0	0	0	0	263	392	0
Future Volume (vph)	0	669	90	0	0	0	0	0	0	263	392	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		150
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.998	0.850									
Flt Protected											0.980	
Satd. Flow (prot)	0	3383	1441	0	0	0	0	0	0	0	3468	0
Flt Permitted											0.980	
Satd. Flow (perm)	0	3383	1441	0	0	0	0	0	0	0	3468	0
Right Turn on Red			Yes			Yes			Yes	No		Yes
Satd. Flow (RTOR)		2	99									
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		501			530			201			212	
Travel Time (s)		11.4			12.0			4.6			4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	0	858	115	0	0	0	0	0	0	337	503	0
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	0	870	103	0	0	0	0	0	0	0	840	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1							1	2	
Detector Template		Thru	Right							Left	Thru	
Leading Detector (ft)		100	20							0	100	
Trailing Detector (ft)		0	0							0	0	
Detector 1 Position(ft)		0	0							0	0	
Detector 1 Size(ft)		6	20							0	6	
Detector 1 Type		Cl+Ex	Cl+Ex							Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0							0.0	0.0	
Detector 1 Queue (s)		0.0	0.0							0.0	0.0	
Detector 1 Delay (s)		0.0	0.0							0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA	Perm							Perm	NA	
Protected Phases		2									4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2							4		
Detector Phase		2	2							4	4	
Switch Phase												
Minimum Initial (s)		10.0	10.0							10.0	10.0	
Minimum Split (s)		14.5	14.5							14.7	14.7	
Total Split (s)		48.0	48.0							52.0	52.0	
Total Split (%)		48.0%	48.0%							52.0%	52.0%	
Maximum Green (s)		43.5	43.5							47.3	47.3	
Yellow Time (s)		3.2	3.2							3.2	3.2	
All-Red Time (s)		1.3	1.3							1.5	1.5	
Lost Time Adjust (s)		-0.5	0.0								-0.7	
Total Lost Time (s)		4.0	4.5								4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0	1.0							1.0	1.0	
Recall Mode		C-Max	C-Max							Max	Max	
Act Effct Green (s)		44.0	43.5								48.0	
Actuated g/C Ratio		0.44	0.44								0.48	
v/c Ratio		0.58	0.15								0.50	
Control Delay		8.5	1.4								18.8	
Queue Delay		0.1	0.0								9.2	
Total Delay		8.6	1.4								27.9	
LOS		A	A								C	
Approach Delay		7.8									27.9	
Approach LOS		A									C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 37 (37%), Referenced to phase 2:EBT, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 17.1		Intersection LOS: B	
Intersection Capacity Utilization 51.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 39: Market St & St Mary's St



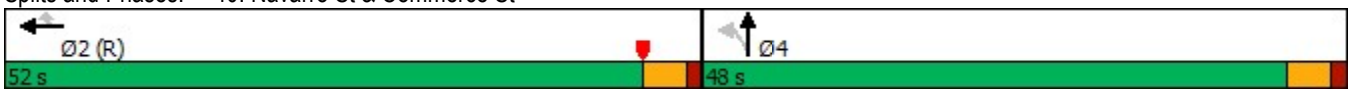


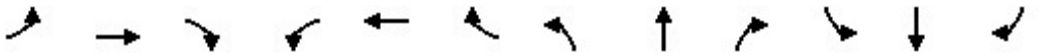
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	646	97	181	384	0	0	0	0
Future Volume (vph)	0	0	0	0	646	97	181	384	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt						0.850						
Flt Protected								0.984				
Satd. Flow (prot)	0	0	0	0	5085	1583	0	5004	0	0	0	0
Flt Permitted								0.984				
Satd. Flow (perm)	0	0	0	0	5085	1583	0	5004	0	0	0	0
Right Turn on Red			Yes			Yes	No		Yes			Yes
Satd. Flow (RTOR)						117						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		534			258			251			297	
Travel Time (s)		12.1			5.9			5.7			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	0	779	117	218	463	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	779	117	0	681	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2	1	1	2				
Detector Template					Thru	Right	Left	Thru				
Leading Detector (ft)					100	20	0	100				
Trailing Detector (ft)					0	0	0	0				
Detector 1 Position(ft)					0	0	0	0				
Detector 1 Size(ft)					6	20	0	6				
Detector 1 Type					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0	0.0	0.0	0.0				
Detector 1 Queue (s)					0.0	0.0	0.0	0.0				
Detector 1 Delay (s)					0.0	0.0	0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					2			4				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						2	4					
Detector Phase					2	2	4	4				
Switch Phase												
Minimum Initial (s)					10.0	10.0	5.0	5.0				
Minimum Split (s)					14.5	14.5	9.6	9.6				
Total Split (s)					52.0	52.0	48.0	48.0				
Total Split (%)					52.0%	52.0%	48.0%	48.0%				
Maximum Green (s)					47.5	47.5	43.4	43.4				
Yellow Time (s)					3.2	3.2	3.2	3.2				
All-Red Time (s)					1.3	1.3	1.4	1.4				
Lost Time Adjust (s)					-1.7	-1.7		-2.0				
Total Lost Time (s)					2.8	2.8		2.6				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					1.0	1.0	1.0	1.0				
Recall Mode					C-Max	C-Max	Max	Max				
Act Effct Green (s)					49.2	49.2		45.4				
Actuated g/C Ratio					0.49	0.49		0.45				
v/c Ratio					0.31	0.14		0.30				
Control Delay					3.5	1.1		14.9				
Queue Delay					0.2	0.0		0.6				
Total Delay					3.7	1.1		15.5				
LOS					A	A		B				
Approach Delay					3.4			15.5				
Approach LOS					A			B				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 85 (85%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay: 8.6		Intersection LOS: A	
Intersection Capacity Utilization 32.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 40: Navarro St & Commerce St



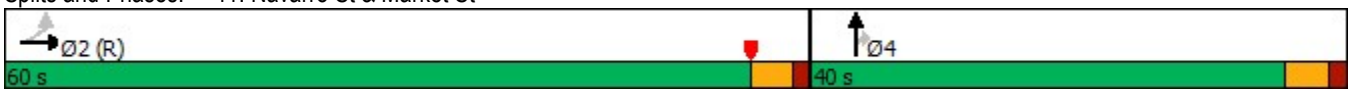


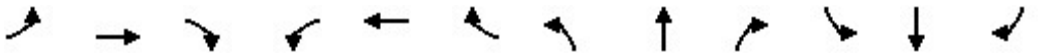
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	241	807	0	0	0	0	0	360	156	0	0	0
Future Volume (vph)	241	807	0	0	0	0	0	360	156	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected		0.989										
Satd. Flow (prot)	0	3500	0	0	0	0	0	3539	1583	0	0	0
Flt Permitted		0.989										
Satd. Flow (perm)	0	3500	0	0	0	0	0	3539	1583	0	0	0
Right Turn on Red	No		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									99			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		530			259			275			251	
Travel Time (s)		12.0			5.9			6.3			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	309	1035	0	0	0	0	0	462	200	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1344	0	0	0	0	0	462	200	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2	1			
Detector Template	Left	Thru						Thru	Right			
Leading Detector (ft)	0	100						100	20			
Trailing Detector (ft)	0	0						0	0			
Detector 1 Position(ft)	0	0						0	0			
Detector 1 Size(ft)	0	6						6	20			
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0	0.0			
Detector 1 Queue (s)	0.0	0.0						0.0	0.0			
Detector 1 Delay (s)	0.0	0.0						0.0	0.0			
Detector 2 Position(ft)		94						94				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0				
Turn Type	Perm	NA						NA	Perm			
Protected Phases		2						4				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2								4			
Detector Phase	2	2						4	4			
Switch Phase												
Minimum Initial (s)	10.0	10.0						10.0	10.0			
Minimum Split (s)	14.5	14.5						14.7	14.7			
Total Split (s)	60.0	60.0						40.0	40.0			
Total Split (%)	60.0%	60.0%						40.0%	40.0%			
Maximum Green (s)	55.5	55.5						35.3	35.3			
Yellow Time (s)	3.2	3.2						3.2	3.2			
All-Red Time (s)	1.3	1.3						1.5	1.5			
Lost Time Adjust (s)		-1.7						-2.0	-2.0			
Total Lost Time (s)		2.8						2.7	2.7			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0						1.0	1.0			
Recall Mode	C-Max	C-Max						Max	Max			
Act Effct Green (s)		57.2						37.3	37.3			
Actuated g/C Ratio		0.57						0.37	0.37			
v/c Ratio		0.67						0.35	0.31			
Control Delay		10.8						23.6	12.5			
Queue Delay		1.2						0.0	0.0			
Total Delay		11.9						23.6	12.5			
LOS		B						C	B			
Approach Delay		11.9						20.2				
Approach LOS		B						C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 75 (75%), Referenced to phase 2:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 14.7		Intersection LOS: B	
Intersection Capacity Utilization 53.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 41: Navarro St & Market St



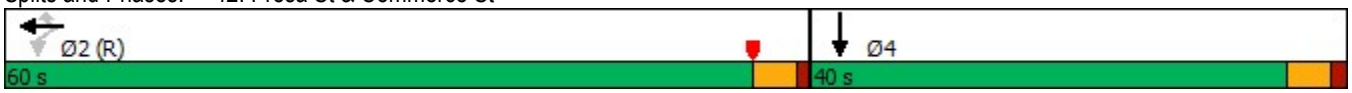


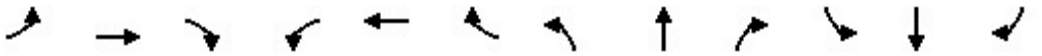
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	62	726	59	0	0	0	0	94	38
Future Volume (vph)	0	0	0	62	726	59	0	0	0	0	94	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.80						
Frt						0.850					0.961	
Flt Protected					0.996							
Satd. Flow (prot)	0	0	0	0	5065	1583	0	0	0	0	1790	0
Flt Permitted					0.996							
Satd. Flow (perm)	0	0	0	0	5065	1273	0	0	0	0	1790	0
Right Turn on Red			Yes	No		Yes			Yes			Yes
Satd. Flow (RTOR)						71					23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		258			287			262			386	
Travel Time (s)		5.9			6.5			6.0			8.8	
Confl. Peds. (#/hr)						200						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	75	876	71	0	0	0	0	113	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	951	71	0	0	0	0	159	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1					2	
Detector Template				Left	Thru	Right					Thru	
Leading Detector (ft)				0	100	20					100	
Trailing Detector (ft)				0	0	0					0	
Detector 1 Position(ft)				0	0	0					0	
Detector 1 Size(ft)				0	6	20					6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0					0.0	
Detector 1 Queue (s)				0.0	0.0	0.0					0.0	
Detector 1 Delay (s)				0.0	0.0	0.0					0.0	
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA	Perm					NA	
Protected Phases					2						4	
Permitted Phases				2		2						
Detector Phase				2	2	2					4	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0					5.0	
Minimum Split (s)				14.3	14.3	14.3					9.6	
Total Split (s)				60.0	60.0	60.0					40.0	
Total Split (%)				60.0%	60.0%	60.0%					40.0%	
Maximum Green (s)				55.7	55.7	55.7					35.4	
Yellow Time (s)				3.2	3.2	3.2					3.2	
All-Red Time (s)				1.1	1.1	1.1					1.4	
Lost Time Adjust (s)					-0.3	0.0					-0.6	
Total Lost Time (s)					4.0	4.3					4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				1.0	1.0	1.0					1.0	
Recall Mode				C-Max	C-Max	C-Max					Max	
Act Effct Green (s)					56.0	55.7					36.0	
Actuated g/C Ratio					0.56	0.56					0.36	
v/c Ratio					0.34	0.10					0.24	
Control Delay					4.8	0.3					20.2	
Queue Delay					0.3	0.0					0.0	
Total Delay					5.0	0.3					20.2	
LOS					A	A					C	
Approach Delay					4.7						20.2	
Approach LOS					A						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 80 (80%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 6.8		Intersection LOS: A	
Intersection Capacity Utilization 44.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 42: Presa St & Commerce St



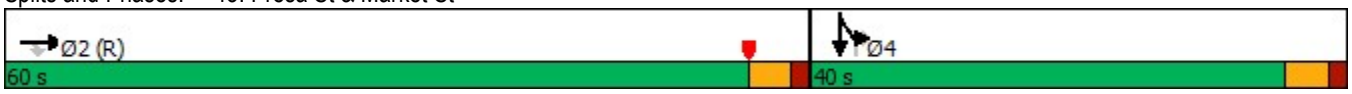


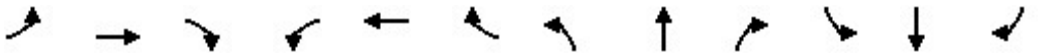
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	940	23	0	0	0	0	0	44	136	78	0
Future Volume (vph)	0	940	23	0	0	0	0	0	44	136	78	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		150	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850						0.865			
Flt Protected										0.950	0.986	
Satd. Flow (prot)	0	3390	1441	0	0	0	0	0	1611	1681	1745	0
Flt Permitted										0.950	0.986	
Satd. Flow (perm)	0	3390	1441	0	0	0	0	0	1611	1681	1745	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)			23						61	61	22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		259			497			339			262	
Travel Time (s)		5.9			11.3			7.7			6.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	0	1206	30	0	0	0	0	0	56	174	100	0
Shared Lane Traffic (%)			10%							23%		
Lane Group Flow (vph)	0	1209	27	0	0	0	0	0	56	134	140	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1						1	1	2	
Detector Template		Thru	Right						Right	Left	Thru	
Leading Detector (ft)		100	20						20	20	100	
Trailing Detector (ft)		0	0						0	0	0	
Detector 1 Position(ft)		0	0						0	0	0	
Detector 1 Size(ft)		6	20						20	20	6	
Detector 1 Type		Cl+Ex	Cl+Ex						Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0						0.0	0.0	0.0	
Detector 1 Queue (s)		0.0	0.0						0.0	0.0	0.0	
Detector 1 Delay (s)		0.0	0.0						0.0	0.0	0.0	
Detector 2 Position(ft)		94									94	
Detector 2 Size(ft)		6									6	
Detector 2 Type		Cl+Ex									Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0									0.0	
Turn Type		NA	Perm						Perm	Split	NA	
Protected Phases		2								4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			2						4			
Detector Phase		2	2						4	4	4	
Switch Phase												
Minimum Initial (s)		10.0	10.0						5.0	5.0	5.0	
Minimum Split (s)		14.7	14.7						9.7	9.7	9.7	
Total Split (s)		60.0	60.0						40.0	40.0	40.0	
Total Split (%)		60.0%	60.0%						40.0%	40.0%	40.0%	
Maximum Green (s)		55.3	55.3						35.3	35.3	35.3	
Yellow Time (s)		3.2	3.2						3.2	3.2	3.2	
All-Red Time (s)		1.5	1.5						1.5	1.5	1.5	
Lost Time Adjust (s)		-0.7	0.0						-0.7	-0.7	-0.7	
Total Lost Time (s)		4.0	4.7						4.0	4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0	1.0						1.0	1.0	1.0	
Recall Mode		C-Max	C-Max						Max	Max	Max	
Act Effct Green (s)		56.0	55.3						36.0	36.0	36.0	
Actuated g/C Ratio		0.56	0.55						0.36	0.36	0.36	
v/c Ratio		0.64	0.03						0.09	0.21	0.22	
Control Delay		6.0	0.7						5.7	10.0	16.1	
Queue Delay		0.5	0.0						0.0	0.6	0.8	
Total Delay		6.5	0.7						5.7	10.6	17.0	
LOS		A	A						A	B	B	
Approach Delay		6.4						5.7			13.9	
Approach LOS		A						A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 80 (80%), Referenced to phase 2:EBT, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 7.7		Intersection LOS: A	
Intersection Capacity Utilization 44.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 43: Presa St & Market St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	190	847	0	0	0	0	0	302	94
Future Volume (vph)	0	0	0	190	847	0	0	0	0	0	302	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt											0.964	
Flt Protected					0.991							
Satd. Flow (prot)	0	0	0	0	5040	0	0	0	0	0	3412	0
Flt Permitted					0.991							
Satd. Flow (perm)	0	0	0	0	5040	0	0	0	0	0	3412	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)					89						43	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		287			180			139			356	
Travel Time (s)		6.5			4.1			3.2			8.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	229	1022	0	0	0	0	0	364	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1251	0	0	0	0	0	477	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2						2	
Detector Template				Left	Thru						Thru	
Leading Detector (ft)				20	100						100	
Trailing Detector (ft)				0	0						0	
Detector 1 Position(ft)				0	0						0	
Detector 1 Size(ft)				20	6						6	
Detector 1 Type				Cl+Ex	Cl+Ex						Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0						0.0	
Detector 1 Queue (s)				0.0	0.0						0.0	
Detector 1 Delay (s)				0.0	0.0						0.0	
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Prot	NA						NA	
Protected Phases				3	2						4	

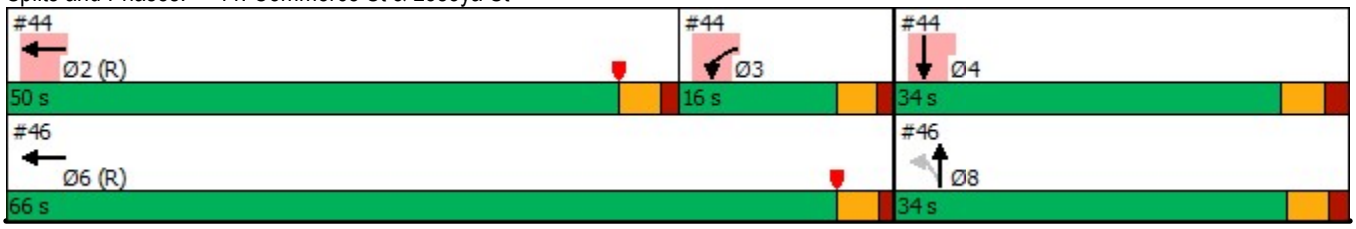
Lane Group	Ø6	Ø8
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Growth Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	6	8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases												
Detector Phase				3	2						4	
Switch Phase												
Minimum Initial (s)				3.0	10.0						5.0	
Minimum Split (s)				7.2	14.5						10.2	
Total Split (s)				16.0	50.0						34.0	
Total Split (%)				16.0%	50.0%						34.0%	
Maximum Green (s)				11.8	45.5						28.8	
Yellow Time (s)				3.0	3.2						3.2	
All-Red Time (s)				1.2	1.3						2.0	
Lost Time Adjust (s)					-1.3						-2.0	
Total Lost Time (s)					3.2						3.2	
Lead/Lag				Lag	Lead							
Lead-Lag Optimize?				Yes	Yes							
Vehicle Extension (s)				3.0	1.0						1.0	
Recall Mode				None	C-Max						Max	
Walk Time (s)					7.0						7.0	
Flash Dont Walk (s)					12.0						15.0	
Pedestrian Calls (#/hr)					0						0	
Act Effct Green (s)					62.8						30.8	
Actuated g/C Ratio					0.63						0.31	
v/c Ratio					2.57dl						0.44	
Control Delay					5.1						26.6	
Queue Delay					0.0						0.0	
Total Delay					5.1						26.6	
LOS					A						C	
Approach Delay					5.1						26.6	
Approach LOS					A						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 70 (70%), Referenced to phase 2:WBT and 6:, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 11.0		Intersection LOS: B	
Intersection Capacity Utilization 41.7%		ICU Level of Service A	
Analysis Period (min) 15			

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 44: Commerce St & Losoya St



Lane Group	Ø6	Ø8
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	10.0	5.0
Minimum Split (s)	14.5	9.8
Total Split (s)	66.0	34.0
Total Split (%)	66%	34%
Maximum Green (s)	61.7	29.2
Yellow Time (s)	3.2	3.2
All-Red Time (s)	1.1	1.6
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	3.0
Recall Mode	C-Max	Max
Walk Time (s)		
Flash Dont Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		

Intersection Summary

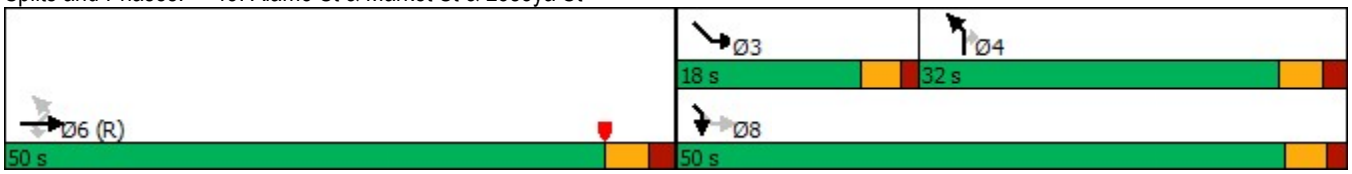


Lane Group	EBL2	EBT	EBR	NBL	NBR	SEL	SER
Lane Configurations							
Traffic Volume (vph)	128	830	93	248	234	377	395
Future Volume (vph)	128	830	93	248	234	377	395
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			150	0	0	0	0
Storage Lanes			1	2	1	2	1
Taper Length (ft)				25		25	
Lane Util. Factor	0.95	0.95	1.00	0.97	1.00	0.97	0.91
Frt			0.850		0.850	0.962	0.850
Flt Protected		0.993		0.950		0.964	
Satd. Flow (prot)	0	3514	1583	3433	1583	3351	1441
Flt Permitted		0.993		0.950		0.591	
Satd. Flow (perm)	0	3514	1583	3433	1583	2055	1441
Right Turn on Red			Yes		Yes		
Satd. Flow (RTOR)			86		76		
Link Speed (mph)		30				30	
Link Distance (ft)		497				195	
Travel Time (s)		11.3				4.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	164	1065	119	318	300	484	507
Shared Lane Traffic (%)							32%
Lane Group Flow (vph)	0	1229	119	318	300	646	345
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Right
Median Width(ft)		0				24	
Link Offset(ft)		0				0	
Crosswalk Width(ft)		16				16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15	9	15	9
Number of Detectors	1	1	1	1	1	1	1
Detector Template		Thru	Right		Right	Left	Right
Leading Detector (ft)	0	100	20	0	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0
Detector 1 Size(ft)	0	100	20	0	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Perm	NA	Perm	Prot	Perm	pm+pt	Prot
Protected Phases		6		4		3	8
Permitted Phases	6		6		4	8	
Detector Phase	6	6	6	4	4	3	8
Switch Phase							
Minimum Initial (s)	10.0	10.0	10.0	5.0	5.0	3.0	5.0
Minimum Split (s)	32.3	32.3	32.3	27.2	27.2	7.3	25.8

Lane Group	EBL2	EBT	EBR	NBL	NBR	SEL	SER
Total Split (s)	50.0	50.0	50.0	32.0	32.0	18.0	50.0
Total Split (%)	50.0%	50.0%	50.0%	32.0%	32.0%	18.0%	50.0%
Maximum Green (s)	44.7	44.7	44.7	26.8	26.8	13.7	45.2
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.0	3.2
All-Red Time (s)	2.1	2.1	2.1	2.0	2.0	1.3	1.6
Lost Time Adjust (s)		-1.3	-1.3	0.0	-1.2	-0.3	-0.8
Total Lost Time (s)		4.0	4.0	5.2	4.0	4.0	4.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Recall Mode	C-Min	C-Min	C-Min	Min	Min	Min	Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0
Flash Dont Walk (s)	20.0	20.0	20.0	15.0	15.0		14.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0
Act Effct Green (s)		52.2	52.2	18.3	19.5	39.8	39.8
Actuated g/C Ratio		0.52	0.52	0.18	0.20	0.40	0.40
v/c Ratio		0.67	0.14	0.51	0.81	0.63	0.60
Control Delay		12.5	1.0	38.5	44.9	22.9	25.3
Queue Delay		0.2	0.0	0.0	0.0	0.4	0.6
Total Delay		12.7	1.0	38.5	44.9	23.3	25.9
LOS		B	A	D	D	C	C
Approach Delay		11.7				24.2	
Approach LOS		B				C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 85 (85%), Referenced to phase 6:EBTL, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 22.1		Intersection LOS: C	
Intersection Capacity Utilization 67.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 45: Alamo St & Market St & Losoya St



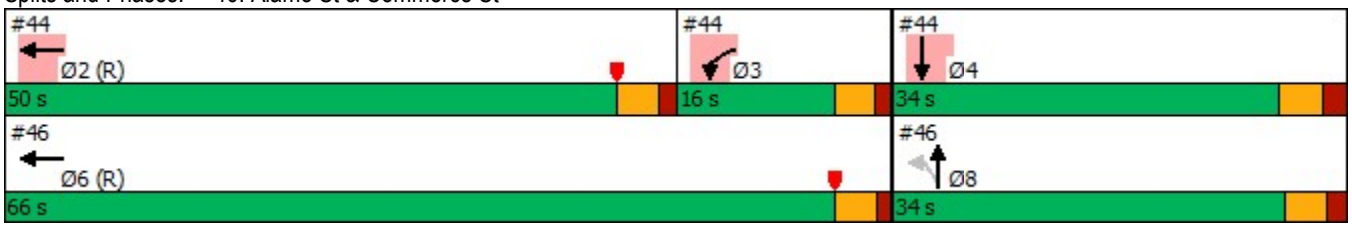
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1000	138	146	267	0	0	0	0
Future Volume (vph)	0	0	0	0	1000	138	146	267	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00
Frt					0.982							
Flt Protected							0.950	0.997				
Satd. Flow (prot)	0	0	0	0	4994	0	1681	1764	0	0	0	0
Flt Permitted							0.950	0.997				
Satd. Flow (perm)	0	0	0	0	4994	0	1681	1764	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					49		87	63				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		180			522			263			375	
Travel Time (s)		4.1			11.9			6.0			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	114%	114%	111%	111%	111%	111%	111%	111%	114%	111%
Adj. Flow (vph)	0	0	0	0	1207	167	176	322	0	0	0	0
Shared Lane Traffic (%)							10%					
Lane Group Flow (vph)	0	0	0	0	1374	0	158	340	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2		1	2				
Detector Template					Thru		Left	Thru				
Leading Detector (ft)					100		20	100				
Trailing Detector (ft)					0		0	0				
Detector 1 Position(ft)					0		0	0				
Detector 1 Size(ft)					6		20	6				
Detector 1 Type					Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0		0.0	0.0				
Detector 1 Queue (s)					0.0		0.0	0.0				
Detector 1 Delay (s)					0.0		0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA		Perm	NA				
Protected Phases					6			8				

Lane Group	Ø2	Ø3	Ø4
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Growth Factor			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Number of Detectors			
Detector Template			
Leading Detector (ft)			
Trailing Detector (ft)			
Detector 1 Position(ft)			
Detector 1 Size(ft)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Detector 2 Position(ft)			
Detector 2 Size(ft)			
Detector 2 Type			
Detector 2 Channel			
Detector 2 Extend (s)			
Turn Type			
Protected Phases	2	3	4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8					
Detector Phase					6		8	8				
Switch Phase												
Minimum Initial (s)					10.0		5.0	5.0				
Minimum Split (s)					14.5		9.8	9.8				
Total Split (s)					66.0		34.0	34.0				
Total Split (%)					66.0%		34.0%	34.0%				
Maximum Green (s)					61.7		29.2	29.2				
Yellow Time (s)					3.2		3.2	3.2				
All-Red Time (s)					1.1		1.6	1.6				
Lost Time Adjust (s)					-1.7		0.0	0.0				
Total Lost Time (s)					2.6		4.8	4.8				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					3.0		3.0	3.0				
Recall Mode					C-Max		Max	Max				
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)					63.4		29.2	29.2				
Actuated g/C Ratio					0.63		0.29	0.29				
v/c Ratio					0.43		0.29	0.61				
Control Delay					10.2		14.4	29.9				
Queue Delay					0.0		1.0	16.8				
Total Delay					10.2		15.4	46.7				
LOS					B		B	D				
Approach Delay					10.2			36.8				
Approach LOS					B			D				

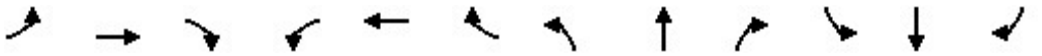
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 70 (70%), Referenced to phase 2:WBT and 6:, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 17.3		Intersection LOS: B	
Intersection Capacity Utilization 47.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 46: Alamo St & Commerce St



Lane Group	Ø2	Ø3	Ø4
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	10.0	3.0	5.0
Minimum Split (s)	14.5	7.2	10.2
Total Split (s)	50.0	16.0	34.0
Total Split (%)	50%	16%	34%
Maximum Green (s)	45.5	11.8	28.8
Yellow Time (s)	3.2	3.0	3.2
All-Red Time (s)	1.3	1.2	2.0
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	1.0	3.0	1.0
Recall Mode	C-Max	None	Max
Walk Time (s)	7.0		7.0
Flash Dont Walk (s)	12.0		15.0
Pedestrian Calls (#/hr)	0		0
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			

Intersection Summary



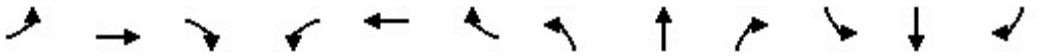
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	139	707	91	88	80	0	0	513	119
Future Volume (vph)	0	0	0	139	707	91	88	80	0	0	513	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	116		150	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	0.95	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor				0.79								
Frt					0.983							0.850
Flt Protected				0.950				0.975				
Satd. Flow (prot)	0	0	0	1770	4999	0	0	3451	0	0	3539	1583
Flt Permitted				0.950				0.576				
Satd. Flow (perm)	0	0	0	1390	4999	0	0	2039	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					31							144
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		907			321			287			349	
Travel Time (s)		20.6			7.3			6.5			7.9	
Confl. Peds. (#/hr)				200								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%	111%
Adj. Flow (vph)	0	0	0	168	853	110	106	97	0	0	619	144
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	168	963	0	0	203	0	0	619	144
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	1
Detector Template				Left	Thru		Left	Thru			Thru	Right
Leading Detector (ft)				20	100		0	100			100	20
Trailing Detector (ft)				0	0		0	0			0	0
Detector 1 Position(ft)				0	0		0	0			0	0
Detector 1 Size(ft)				20	6		0	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA		pm+pt	NA			NA	Perm
Protected Phases					2		7	4			8	
Permitted Phases				2			4					8
Detector Phase				2	2		7	4			8	8
Switch Phase												
Minimum Initial (s)				10.0	10.0		3.0	5.0			5.0	5.0
Minimum Split (s)				33.3	33.3		7.4	29.1			27.1	27.1
Total Split (s)				52.0	52.0		15.0	48.0			33.0	33.0
Total Split (%)				52.0%	52.0%		15.0%	48.0%			33.0%	33.0%
Maximum Green (s)				46.7	46.7		10.6	42.9			27.9	27.9
Yellow Time (s)				3.2	3.2		3.0	3.2			3.2	3.2
All-Red Time (s)				2.1	2.1		1.4	1.9			1.9	1.9
Lost Time Adjust (s)				-1.3	-1.3			-1.1			-1.1	-1.1
Total Lost Time (s)				4.0	4.0			4.0			4.0	4.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				2.0	2.0		1.0	1.0			1.0	1.0
Recall Mode				C-Max	C-Max		Max	Max			Max	Max
Walk Time (s)				7.0	7.0			7.0			7.0	7.0
Flash Dont Walk (s)				21.0	21.0			17.0			15.0	15.0
Pedestrian Calls (#/hr)				0	0			0			0	0
Act Effct Green (s)				48.0	48.0			44.0			29.0	29.0
Actuated g/C Ratio				0.48	0.48			0.44			0.29	0.29
v/c Ratio				0.25	0.40			0.19			0.60	0.26
Control Delay				16.7	16.7			28.4			33.5	5.9
Queue Delay				0.0	0.0			0.0			0.0	0.0
Total Delay				16.7	16.7			28.4			33.5	5.9
LOS				B	B			C			C	A
Approach Delay					16.7			28.4			28.3	
Approach LOS					B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:WBTL, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 22.1		Intersection LOS: C	
Intersection Capacity Utilization 48.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 47: Bowie St & Commerce St





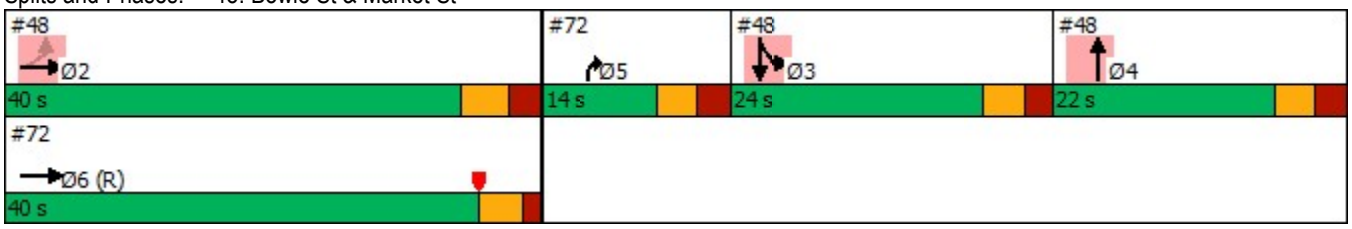
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	162	1029	9	0	0	0	0	42	87	575	30	0
Future Volume (vph)	162	1029	9	0	0	0	0	42	87	575	30	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.999						0.909				
Flt Protected		0.993								0.950	0.957	
Satd. Flow (prot)	0	5045	0	0	0	0	0	1693	0	1681	1694	0
Flt Permitted		0.993								0.950	0.957	
Satd. Flow (perm)	0	5045	0	0	0	0	0	1693	0	1681	1694	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		1										
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1007			195			284			287	
Travel Time (s)		22.9			4.4			6.5			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	208	1320	12	0	0	0	0	54	112	738	38	0
Shared Lane Traffic (%)										48%		
Lane Group Flow (vph)	0	1540	0	0	0	0	0	166	0	384	392	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2						2		1	2	
Detector Template	Left	Thru						Thru		Left	Thru	
Leading Detector (ft)	20	100						100		20	100	
Trailing Detector (ft)	0	0						0		0	0	
Detector 1 Position(ft)	0	0						0		0	0	
Detector 1 Size(ft)	20	6						6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex						Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0						0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0						0.0		0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA						NA		Split	NA	
Protected Phases		2						4		3	3	
Permitted Phases	2											
Detector Phase	2	2						4		3	3	
Switch Phase												

Lane Group	Ø5	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Growth Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	5	6
Permitted Phases		
Detector Phase		
Switch Phase		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0						5.0		5.0	5.0	
Minimum Split (s)	12.0	12.0						12.0		22.0	22.0	
Total Split (s)	40.0	40.0						22.0		24.0	24.0	
Total Split (%)	40.0%	40.0%						22.0%		24.0%	24.0%	
Maximum Green (s)	34.0	34.0						16.5		18.7	18.7	
Yellow Time (s)	3.5	3.5						3.0		3.2	3.2	
All-Red Time (s)	2.5	2.5						2.5		2.1	2.1	
Lost Time Adjust (s)		-0.7						-1.1		-1.3	-1.5	
Total Lost Time (s)		5.3						4.4		4.0	3.8	
Lead/Lag										Lag	Lag	
Lead-Lag Optimize?										Yes	Yes	
Vehicle Extension (s)	3.0	3.0						3.0		1.0	1.0	
Recall Mode	Max	Max						Max		None	None	
Act Effct Green (s)		34.7						17.6		34.0	34.2	
Actuated g/C Ratio		0.35						0.18		0.34	0.34	
v/c Ratio		0.88						0.56		0.67	0.68	
Control Delay		33.5						45.8		18.2	18.2	
Queue Delay		0.0						0.0		0.0	0.0	
Total Delay		33.5						45.8		18.2	18.2	
LOS		C						D		B	B	
Approach Delay		33.5						45.8			18.2	
Approach LOS		C						D			B	

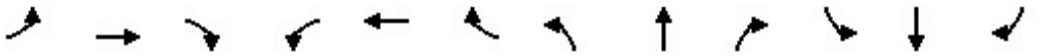
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 18 (18%), Referenced to phase 6:EBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 29.5		Intersection LOS: C	
Intersection Capacity Utilization 67.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 48: Bowie St & Market St



Lane Group	Ø5	Ø6
Minimum Initial (s)	5.0	10.0
Minimum Split (s)	12.0	25.0
Total Split (s)	14.0	40.0
Total Split (%)	14%	40%
Maximum Green (s)	8.5	35.3
Yellow Time (s)	3.0	3.2
All-Red Time (s)	2.5	1.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	1.0
Recall Mode	None	C-Min
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		

Intersection Summary



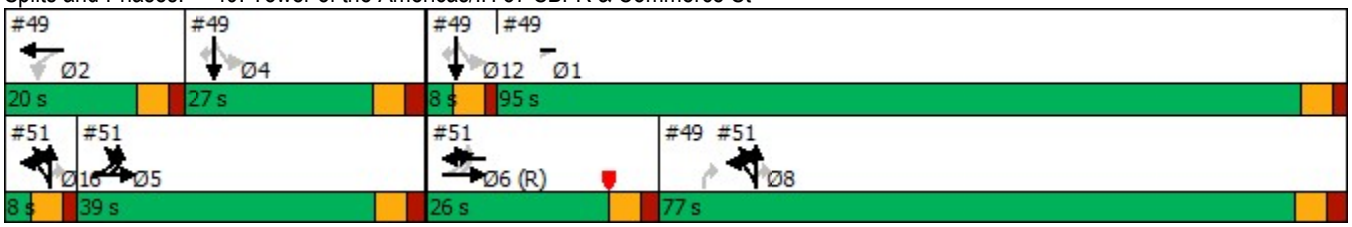
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	123	637	0	0	0	214	84	17	363
Future Volume (vph)	0	0	0	123	637	0	0	0	214	84	17	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt									0.865			0.850
Flt Protected					0.992						0.960	
Satd. Flow (prot)	0	0	0	0	3511	0	0	0	1611	0	3398	1583
Flt Permitted					0.992						0.960	
Satd. Flow (perm)	0	0	0	0	3511	0	0	0	1611	0	3398	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)												262
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		313			283			336			353	
Travel Time (s)		7.1			6.4			7.6			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%
Adj. Flow (vph)	0	0	0	156	810	0	0	0	272	107	22	462
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	966	0	0	0	272	0	129	462
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2				1	1	2	1
Detector Template				Left	Thru				Right	Left	Thru	Right
Leading Detector (ft)				20	100				20	20	100	20
Trailing Detector (ft)				0	0				0	0	0	0
Detector 1 Position(ft)				0	0				0	0	0	0
Detector 1 Size(ft)				20	6				20	20	6	20
Detector 1 Type				Cl+Ex	Cl+Ex				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0				0.0	0.0	0.0	0.0
Detector 1 Queue (s)				0.0	0.0				0.0	0.0	0.0	0.0
Detector 1 Delay (s)				0.0	0.0				0.0	0.0	0.0	0.0
Detector 2 Position(ft)					94						94	
Detector 2 Size(ft)					6						6	
Detector 2 Type					Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0						0.0	
Turn Type				Perm	NA				Perm	Perm	NA	Perm
Protected Phases					1 2						4 12	
Permitted Phases				1 2					8	4 12		4 12
Detector Phase				1 2	1 2				8	4 12	4 12	4 12
Switch Phase												

Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø12	Ø16
Lane Configurations							
Traffic Volume (vph)							
Future Volume (vph)							
Ideal Flow (vphpl)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Growth Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	12	16
Permitted Phases							
Detector Phase							
Switch Phase							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)									3.0			
Minimum Split (s)									38.0			
Total Split (s)									77.0			
Total Split (%)									51.3%			
Maximum Green (s)									71.0			
Yellow Time (s)									3.6			
All-Red Time (s)									2.4			
Lost Time Adjust (s)									-1.3			
Total Lost Time (s)									4.7			
Lead/Lag									Lag			
Lead-Lag Optimize?									Yes			
Vehicle Extension (s)									3.0			
Recall Mode									Max			
Walk Time (s)									7.0			
Flash Dont Walk (s)									14.0			
Pedestrian Calls (#/hr)									0			
Act Effct Green (s)					111.0				72.3		31.0	31.0
Actuated g/C Ratio					0.74				0.48		0.21	0.21
v/c Ratio					0.37				0.35		0.18	0.86
Control Delay					1.1				25.9		49.9	41.4
Queue Delay					0.5				5.5		0.0	0.0
Total Delay					1.6				31.3		49.9	41.4
LOS					A				C		D	D
Approach Delay					1.6			31.3			43.2	
Approach LOS					A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 31 (21%), Referenced to phase 6:EBWB, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 19.4		Intersection LOS: B	
Intersection Capacity Utilization 57.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 49: Tower of the Americas/IH 37 SBFR & Commerce St



Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø12	Ø16
Minimum Initial (s)	3.0	10.0	3.0	3.0	6.0	1.0	1.0
Minimum Split (s)	37.3	19.3	27.0	37.7	23.7	6.1	7.4
Total Split (s)	95.0	20.0	27.0	39.0	26.0	8.0	8.0
Total Split (%)	63%	13%	18%	26%	17%	5%	5%
Maximum Green (s)	89.7	14.7	21.0	33.3	20.3	2.9	2.9
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.7	1.7	2.4	2.1	2.1	1.5	1.5
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	Max	Max	C-Max	Max	Max
Walk Time (s)		7.0	7.0		7.0		
Flash Dont Walk (s)		7.0	14.0		11.0		
Pedestrian Calls (#/hr)		0	0		0		
Act Effct Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							

Intersection Summary



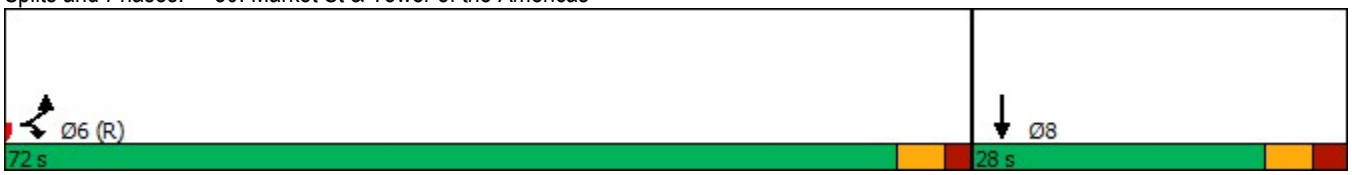
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	192	1465	0	0	142	0
Future Volume (vph)	192	1465	0	0	142	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1770	2787	0	0	3539	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	2787	0	0	3539	0
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	30			30	30	
Link Distance (ft)	622			629	336	
Travel Time (s)	14.1			14.3	7.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	118%	118%	118%	118%	118%	118%
Adj. Flow (vph)	246	1879	0	0	182	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	246	1879	0	0	182	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1			2	
Detector Template	Left	Right			Thru	
Leading Detector (ft)	20	20			100	
Trailing Detector (ft)	0	0			0	
Detector 1 Position(ft)	0	0			0	
Detector 1 Size(ft)	20	20			6	
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0			0.0	
Detector 2 Position(ft)					94	
Detector 2 Size(ft)					6	
Detector 2 Type					Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)					0.0	
Turn Type	Prot	Prot			NA	
Protected Phases	6	6			8	
Permitted Phases						
Detector Phase	6	6			8	
Switch Phase						



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	10.0	10.0			6.0	
Minimum Split (s)	37.6	37.6			27.3	
Total Split (s)	72.0	72.0			28.0	
Total Split (%)	72.0%	72.0%			28.0%	
Maximum Green (s)	66.4	66.4			21.7	
Yellow Time (s)	3.6	3.6			3.6	
All-Red Time (s)	2.0	2.0			2.7	
Lost Time Adjust (s)	-1.6	-1.6			-2.3	
Total Lost Time (s)	4.0	4.0			4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0	1.0			1.0	
Recall Mode	C-Min	C-Min			None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	25.0	25.0			14.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effct Green (s)	81.0	81.0			11.0	
Actuated g/C Ratio	0.81	0.81			0.11	
v/c Ratio	0.17	0.83			0.47	
Control Delay	2.6	10.4			45.5	
Queue Delay	0.0	1.5			0.0	
Total Delay	2.6	12.0			45.5	
LOS	A	B			D	
Approach Delay	10.9				45.5	
Approach LOS	B				D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2: and 6:EBL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 13.6		Intersection LOS: B	
Intersection Capacity Utilization 72.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 50: Market St & Tower of the Americas





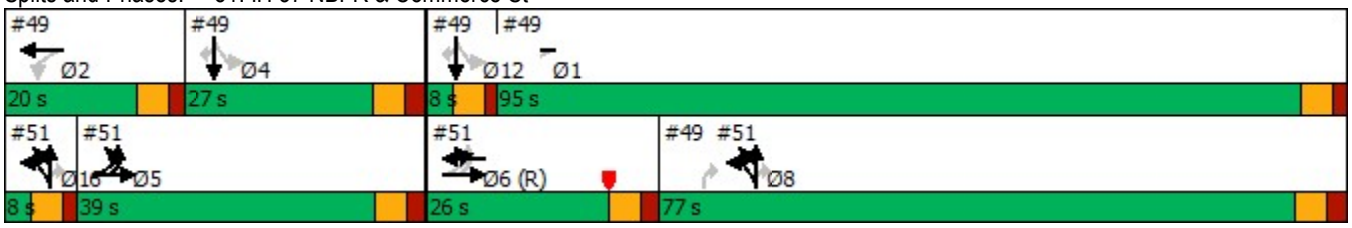
Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR	Ø1	Ø2
Lane Configurations												
Traffic Volume (vph)	93	28	176	335	157	51	432	418	130	92		
Future Volume (vph)	93	28	176	335	157	51	432	418	130	92		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0			86			0		0		
Storage Lanes		1			1			2		1		
Taper Length (ft)		25						25				
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	0.95	0.97	1.00	1.00	1.00		
Frt					0.850					0.850		
Flt Protected		0.950					0.950		0.963			
Satd. Flow (prot)	0	1770	1863	3539	1583	0	3433	0	1794	1583		
Flt Permitted		0.182					0.950		0.963			
Satd. Flow (perm)	0	339	1863	3539	1583	0	3433	0	1794	1583		
Right Turn on Red						Yes				Yes		
Satd. Flow (RTOR)					141					139		
Link Speed (mph)			30	30					30			
Link Distance (ft)			283	712					755			
Travel Time (s)			6.4	16.2					17.2			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%		
Adj. Flow (vph)	118	36	224	426	200	65	549	532	165	117		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	154	224	426	265	0	549	0	697	117		
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Left	Right	Right	Left	Left	Left	Right		
Median Width(ft)			12	12					24			
Link Offset(ft)			0	0					0			
Crosswalk Width(ft)			16	16					16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15	15			9	9	15	15		9		
Number of Detectors	1	1	2	2	1		1	1	2	1		
Detector Template	Left	Left	Thru	Thru	Right		Left		Thru			
Leading Detector (ft)	20	20	100	100	20		20	0	100	0		
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0		
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0		
Detector 1 Size(ft)	20	20	6	6	20		20	0	6	0		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Detector 2 Position(ft)			94	94					94			
Detector 2 Size(ft)			6	6					6			
Detector 2 Type			Cl+Ex	Cl+Ex					Cl+Ex			
Detector 2 Channel												
Detector 2 Extend (s)			0.0	0.0					0.0			
Turn Type	D.P+P	D.P+P	NA	NA	Prot		Split	Split	NA	Perm		
Protected Phases	5	5	5 6	6	6		8 16	8 16	8 16		1	2

Lane Group	Ø4	Ø8	Ø12	Ø16
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Growth Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	4	8	12	16

Lane Group	EBL2	EBL	EBT	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR	Ø1	Ø2
Permitted Phases	6	6								8 16		
Detector Phase	5	5	5 6	6	6		8 16	8 16	8 16	8 16		
Switch Phase												
Minimum Initial (s)	3.0	3.0		6.0	6.0						3.0	10.0
Minimum Split (s)	37.7	37.7		23.7	23.7						37.3	19.3
Total Split (s)	39.0	39.0		26.0	26.0						95.0	20.0
Total Split (%)	26.0%	26.0%		17.3%	17.3%						63%	13%
Maximum Green (s)	33.3	33.3		20.3	20.3						89.7	14.7
Yellow Time (s)	3.6	3.6		3.6	3.6						3.6	3.6
All-Red Time (s)	2.1	2.1		2.1	2.1						1.7	1.7
Lost Time Adjust (s)		-1.7		-1.7	-1.7							
Total Lost Time (s)		4.0		4.0	4.0							
Lead/Lag	Lag	Lag		Lead	Lead						Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes						Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0						3.0	3.0
Recall Mode	Max	Max		C-Max	C-Max						Max	Max
Walk Time (s)				7.0	7.0							7.0
Flash Dont Walk (s)				11.0	11.0							7.0
Pedestrian Calls (#/hr)				0	0							0
Act Effct Green (s)		57.0	61.0	22.0	22.0		81.0		81.0	79.0		
Actuated g/C Ratio		0.38	0.41	0.15	0.15		0.54		0.54	0.53		
v/c Ratio		0.33	0.30	0.82	0.75		0.30		0.72	0.13		
Control Delay		46.3	46.7	75.8	42.5		19.4		31.3	1.8		
Queue Delay		1.5	3.8	2.7	0.0		0.0		0.0	0.0		
Total Delay		47.9	50.5	78.5	42.5		19.4		31.3	1.8		
LOS		D	D	E	D		B		C	A		
Approach Delay			49.4	64.7					24.0			
Approach LOS			D	E					C			

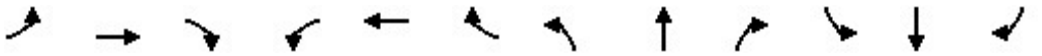
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 31 (21%), Referenced to phase 6:EBWB, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 39.5		Intersection LOS: D	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 51: IH 37 NBFR & Commerce St



Lane Group	Ø4	Ø8	Ø12	Ø16
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	3.0	3.0	1.0	1.0
Minimum Split (s)	27.0	38.0	6.1	7.4
Total Split (s)	27.0	77.0	8.0	8.0
Total Split (%)	18%	51%	5%	5%
Maximum Green (s)	21.0	71.0	2.9	2.9
Yellow Time (s)	3.6	3.6	3.6	3.6
All-Red Time (s)	2.4	2.4	1.5	1.5
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	Max	Max
Walk Time (s)	7.0	7.0		
Flash Dont Walk (s)	14.0	14.0		
Pedestrian Calls (#/hr)	0	0		
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary

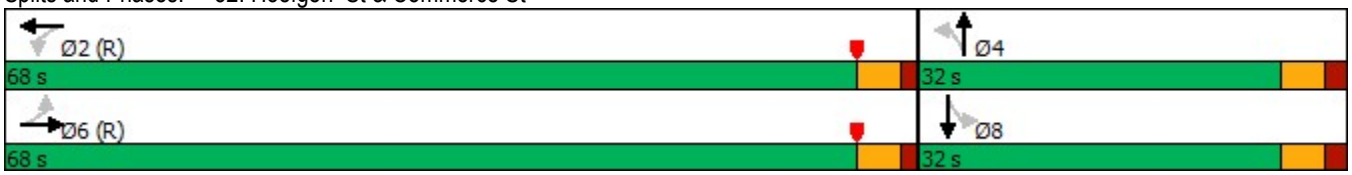


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	216	33	12	431	7	25	9	12	7	3	87
Future Volume (vph)	19	216	33	12	431	7	25	9	12	7	3	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982			0.998			0.913			0.879	
Flt Protected		0.996			0.999		0.950				0.996	
Satd. Flow (prot)	0	3462	0	0	3529	0	1770	1701	0	0	1631	0
Flt Permitted		0.900			0.943		0.488				0.974	
Satd. Flow (perm)	0	3128	0	0	3331	0	909	1701	0	0	1595	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			3			15			111	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		712			691			421			307	
Travel Time (s)		16.2			15.7			9.6			7.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%
Adj. Flow (vph)	24	275	42	15	548	9	32	11	15	9	4	111
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	341	0	0	572	0	32	26	0	0	124	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	0	100		0	100		20	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	0	6		0	6		20	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	22.6	22.6		22.6	22.6		25.0	25.0		25.0	25.0	
Total Split (s)	68.0	68.0		68.0	68.0		32.0	32.0		32.0	32.0	
Total Split (%)	68.0%	68.0%		68.0%	68.0%		32.0%	32.0%		32.0%	32.0%	
Maximum Green (s)	63.4	63.4		63.4	63.4		27.0	27.0		27.0	27.0	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.4	1.4		1.4	1.4		1.8	1.8		1.8	1.8	
Lost Time Adjust (s)		-0.6			-0.6		-1.0	-1.0			-1.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		13.0	13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		83.8			83.8		8.2	8.2			8.2	
Actuated g/C Ratio		0.84			0.84		0.08	0.08			0.08	
v/c Ratio		0.13			0.20		0.43	0.17			0.53	
Control Delay		1.5			1.8		61.2	28.0			19.6	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		1.5			1.8		61.2	28.0			19.6	
LOS		A			A		E	C			B	
Approach Delay		1.5			1.8			46.3			19.6	
Approach LOS		A			A			D			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 10 (10%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 6.1		Intersection LOS: A	
Intersection Capacity Utilization 45.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 52: Hoefgen St & Commerce St

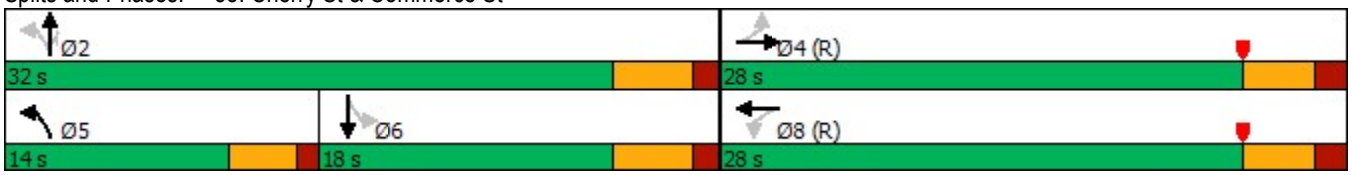


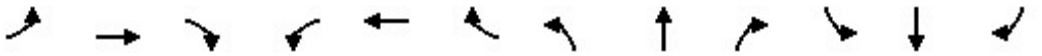
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	199	13	69	286	17	35	86	53	55	288	24
Future Volume (vph)	48	199	13	69	286	17	35	86	53	55	288	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	0		150
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.992			0.993				0.850		0.990	
Flt Protected		0.991			0.991			0.986			0.993	
Satd. Flow (prot)	0	3479	0	0	3483	0	0	1837	1583	0	3479	0
Flt Permitted		0.827			0.834			0.737			0.880	
Satd. Flow (perm)	0	2904	0	0	2931	0	0	1373	1583	0	3083	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			10				67		11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		691			236			259			1425	
Travel Time (s)		15.7			5.4			5.9			32.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%	117%
Adj. Flow (vph)	61	253	17	88	364	22	45	109	67	70	366	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	331	0	0	474	0	0	154	67	0	467	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	0	100		0	100		0	100	0	0	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	0	6		0	6		0	6	0	0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases		4			8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		3.0	10.0	10.0	10.0	10.0	
Minimum Split (s)	24.7	24.7		24.7	24.7		7.0	24.9	24.9	24.9	24.9	
Total Split (s)	28.0	28.0		28.0	28.0		14.0	32.0	32.0	18.0	18.0	
Total Split (%)	46.7%	46.7%		46.7%	46.7%		23.3%	53.3%	53.3%	30.0%	30.0%	
Maximum Green (s)	23.3	23.3		23.3	23.3		10.0	27.1	27.1	13.1	13.1	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.0	3.6	3.6	3.6	3.6	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.0	1.3	1.3	1.3	1.3	
Lost Time Adjust (s)		-0.7			-0.7			-0.9	0.0		-0.9	
Total Lost Time (s)		4.0			4.0			4.0	4.9		4.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	2.0	2.0	2.0	2.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	None	None	None	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0	7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0			13.0	13.0	13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0	0	0	
Act Effct Green (s)		37.8			37.8			14.2	13.3		14.2	
Actuated g/C Ratio		0.63			0.63			0.24	0.22		0.24	
v/c Ratio		0.18			0.26			0.47	0.17		0.63	
Control Delay		5.3			5.7			24.0	6.2		19.9	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		5.3			5.7			24.0	6.2		19.9	
LOS		A			A			C	A		B	
Approach Delay		5.3			5.7			18.6			19.9	
Approach LOS		A			A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 2 (3%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 12.0		Intersection LOS: B	
Intersection Capacity Utilization 54.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 53: Cherry St & Commerce St





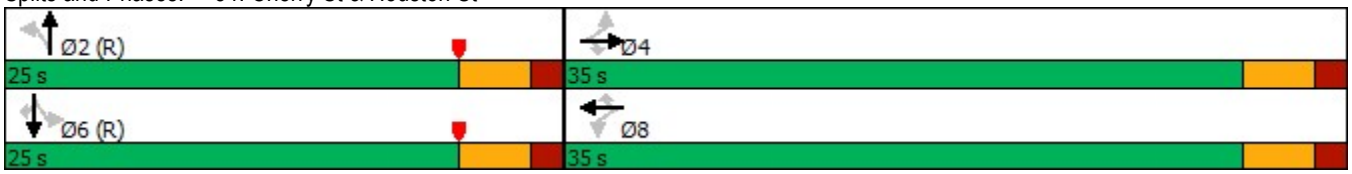
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	217	82	36	139	35	23	155	26	29	265	6
Future Volume (vph)	8	217	82	36	139	35	23	155	26	29	265	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		50	0		150	0		0
Storage Lanes	0		1	0		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00	0.96		1.00	0.96		0.99			1.00	0.93
Frt			0.850			0.850		0.981				0.850
Flt Protected		0.998			0.990			0.994			0.995	
Satd. Flow (prot)	0	1859	1583	0	1844	1583	0	3419	0	0	1853	1583
Flt Permitted		0.985			0.780			0.898			0.953	
Satd. Flow (perm)	0	1833	1518	0	1447	1518	0	3081	0	0	1769	1470
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			110			47		30				31
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		480			939			1425			459	
Travel Time (s)		10.9			21.3			32.4			10.4	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	11	290	110	48	186	47	31	207	35	39	354	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	301	110	0	234	47	0	273	0	0	393	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	0	100	0	0	100	20	0	100		0	100	0
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	0	6	0	0	6	20	0	6		0	6	0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

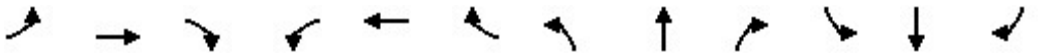
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		6
Detector Phase	4	4	4	8	8	8	2	2		6	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	22.7	22.7	22.7	22.7	22.7	22.7	21.7	21.7		21.7	21.7	21.7
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	25.0	25.0		25.0	25.0	25.0
Total Split (%)	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	41.7%	41.7%		41.7%	41.7%	41.7%
Maximum Green (s)	30.3	30.3	30.3	30.3	30.3	30.3	20.3	20.3		20.3	20.3	20.3
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2		3.2	3.2	3.2
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	1.5
Lost Time Adjust (s)		-0.7	0.0		-0.7	-0.7		-0.7			-0.7	0.0
Total Lost Time (s)		4.0	4.7		4.0	4.0		4.0			4.0	4.7
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	None	None	None	None	None	C-Min	C-Min		C-Min	C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	10.0	10.0		10.0	10.0	10.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	0
Act Effct Green (s)		15.7	15.0		15.7	15.7		36.3			36.3	35.6
Actuated g/C Ratio		0.26	0.25		0.26	0.26		0.60			0.60	0.59
v/c Ratio		0.63	0.24		0.62	0.11		0.15			0.37	0.01
Control Delay		25.0	5.0		31.7	12.9		4.7			8.3	0.6
Queue Delay		0.0	0.0		0.0	0.0		0.0			0.0	0.0
Total Delay		25.0	5.0		31.7	12.9		4.7			8.3	0.6
LOS		C	A		C	B		A			A	A
Approach Delay		19.6			28.5			4.7			8.2	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 54 (90%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.63
Intersection Signal Delay: 15.1 Intersection LOS: B
Intersection Capacity Utilization 75.2% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 54: Cherry St & Houston St



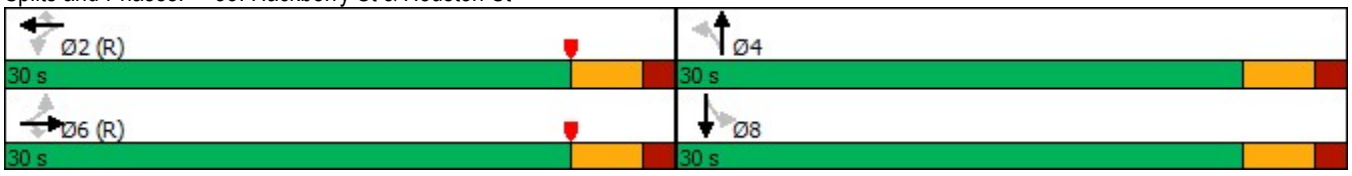


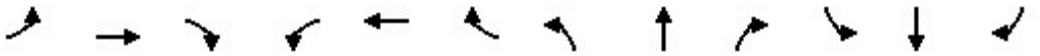
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	226	42	52	172	37	21	195	60	32	221	6
Future Volume (vph)	15	226	42	52	172	37	21	195	60	32	221	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		120	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		1.00	0.96		1.00	0.96		0.99			1.00	
Frt			0.850			0.850		0.967			0.997	
Flt Protected		0.997			0.988			0.996			0.994	
Satd. Flow (prot)	0	1857	1583	0	1840	1583	0	3377	0	0	3502	0
Flt Permitted		0.976			0.873			0.901			0.826	
Satd. Flow (perm)	0	1816	1515	0	1619	1515	0	3047	0	0	2903	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			56			49		74			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		939			955			521			463	
Travel Time (s)		21.3			21.7			11.8			10.5	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	20	302	56	70	230	49	28	261	80	43	295	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	322	56	0	300	49	0	369	0	0	346	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	0	100	0	0	100	0	0	100		0	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	0	6	0	0	6	0	0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	6.0	6.0		6.0	6.0	
Minimum Split (s)	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7		21.7	21.7	
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3		25.3	25.3	
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2		3.2	3.2	
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-0.7	0.0		-0.7	0.0		-0.7			-0.7	
Total Lost Time (s)		4.0	4.7		4.0	4.7		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min	C-Min	C-Min	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0		0	0	
Act Effct Green (s)		41.1	40.4		41.1	40.4		10.9			10.9	
Actuated g/C Ratio		0.68	0.67		0.68	0.67		0.18			0.18	
v/c Ratio		0.26	0.05		0.27	0.05		0.60			0.65	
Control Delay		2.0	0.4		6.8	2.8		21.6			27.9	
Queue Delay		0.0	0.0		0.0	0.0		0.0			0.0	
Total Delay		2.0	0.4		6.8	2.8		21.6			27.9	
LOS		A	A		A	A		C			C	
Approach Delay		1.8			6.2			21.6			27.9	
Approach LOS		A			A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 55 (92%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 14.2		Intersection LOS: B	
Intersection Capacity Utilization 68.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 55: Hackberry St & Houston St



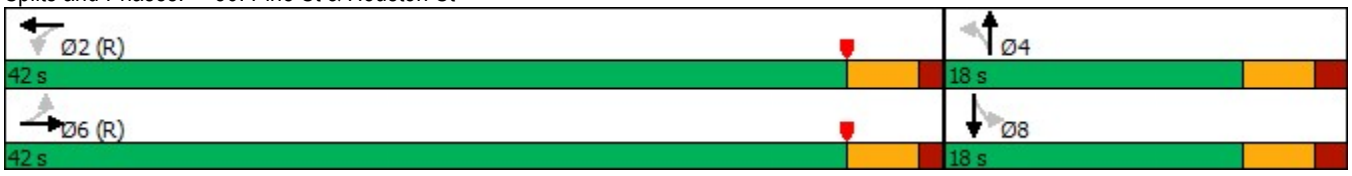


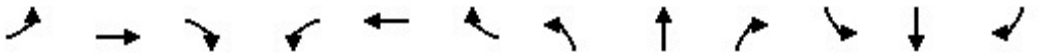
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	286	10	22	236	37	1	40	14	44	85	11
Future Volume (vph)	13	286	10	22	236	37	1	40	14	44	85	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	1.00		0.97	0.99			0.98			0.98	
Frt		0.995			0.980			0.965			0.989	
Flt Protected	0.950			0.950				0.999			0.985	
Satd. Flow (prot)	1770	1849	0	1770	1807	0	0	1765	0	0	1805	0
Flt Permitted	0.533			0.512				0.995			0.881	
Satd. Flow (perm)	961	1849	0	925	1807	0	0	1757	0	0	1593	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			25			19			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		955			2820			472			467	
Travel Time (s)		21.7			64.1			10.7			10.6	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	17	382	13	29	316	49	1	53	19	59	114	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	395	0	29	365	0	0	73	0	0	188	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	20.4	20.4		20.4	20.4		10.7	10.7		10.7	10.7	
Total Split (s)	42.0	42.0		42.0	42.0		18.0	18.0		18.0	18.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	37.6	37.6		37.6	37.6		13.3	13.3		13.3	13.3	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	-0.4	-0.4		-0.4	-0.4			-0.4			-0.4	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.3			4.3	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	9.0	9.0		9.0	9.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	41.0	41.0		41.0	41.0			10.7			10.7	
Actuated g/C Ratio	0.68	0.68		0.68	0.68			0.18			0.18	
v/c Ratio	0.03	0.31		0.05	0.29			0.22			0.65	
Control Delay	5.1	5.7		4.4	4.9			16.9			31.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	5.1	5.7		4.4	4.9			16.9			31.9	
LOS	A	A		A	A			B			C	
Approach Delay		5.6			4.9			16.9			31.9	
Approach LOS		A			A			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 32 (53%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 10.8		Intersection LOS: B	
Intersection Capacity Utilization 45.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 56: Pine St & Houston St



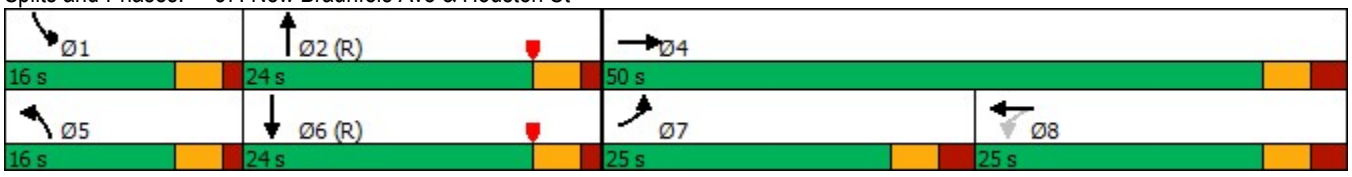


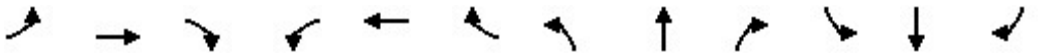
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	173	75	78	160	59	80	385	55	70	487	91
Future Volume (vph)	111	173	75	78	160	59	80	385	55	70	487	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	226		0	208		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.955			0.960			0.981			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1779	0	1770	1788	0	1770	3472	0	1770	3454	0
Flt Permitted	0.950			0.561			0.950			0.950		
Satd. Flow (perm)	1770	1779	0	1045	1788	0	1770	3472	0	1770	3454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		35			19			16			22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2820			1473			922			669	
Travel Time (s)		64.1			33.5			21.0			15.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	148	231	100	104	214	79	107	515	74	94	651	122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	148	331	0	104	293	0	107	589	0	94	773	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases	7	4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				8								
Detector Phase	7	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		3.0	10.0		3.0	10.0	
Minimum Split (s)	8.7	8.7		8.7	8.7		7.6	14.6		7.6	14.6	
Total Split (s)	25.0	50.0		25.0	25.0		16.0	24.0		16.0	24.0	
Total Split (%)	27.8%	55.6%		27.8%	27.8%		17.8%	26.7%		17.8%	26.7%	
Maximum Green (s)	19.3	44.3		19.3	19.3		11.4	19.4		11.4	19.4	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	2.5	2.5		2.5	2.5		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-1.7	-1.7		-1.7	-1.7		-0.6	-0.6		-0.6	-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	0.5	1.0		1.0	1.0		0.5	2.0		0.5	2.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		3.0		3.0	3.0			7.0			7.0	
Flash Dont Walk (s)		2.0		2.0	2.0			12.0			12.0	
Pedestrian Calls (#/hr)		0		0	0			0			0	
Act Effct Green (s)	12.2	35.0		18.7	18.7		8.7	36.5		8.2	36.0	
Actuated g/C Ratio	0.14	0.39		0.21	0.21		0.10	0.41		0.09	0.40	
v/c Ratio	0.62	0.46		0.48	0.76		0.62	0.42		0.58	0.55	
Control Delay	47.2	19.1		39.6	45.8		54.3	23.3		52.9	26.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	47.2	19.1		39.6	45.8		54.3	23.3		52.9	26.3	
LOS	D	B		D	D		D	C		D	C	
Approach Delay		27.7			44.1			28.1			29.1	
Approach LOS		C			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 55 (61%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 31.0		Intersection LOS: C	
Intersection Capacity Utilization 61.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 57: New Braunfels Ave & Houston St





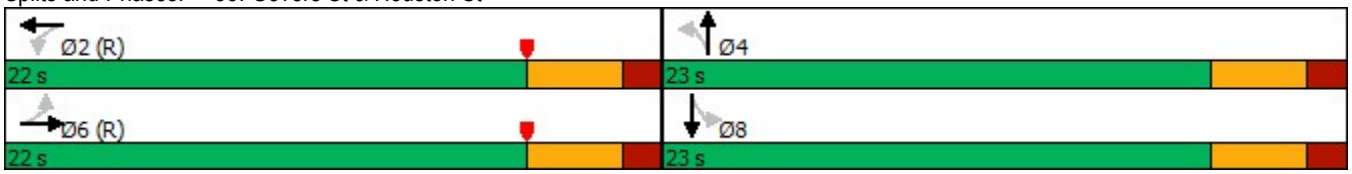
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	294	23	35	249	6	32	37	31	5	35	6
Future Volume (vph)	8	294	23	35	249	6	32	37	31	5	35	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	120		0	122		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	1.00		0.98	1.00		0.97	0.97		0.97	0.99	
Frt		0.989			0.996			0.932			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1834	0	1770	1853	0	1770	1691	0	1770	1807	0
Flt Permitted	0.556			0.515			0.870			0.870		
Satd. Flow (perm)	1012	1834	0	941	1853	0	1564	1691	0	1567	1807	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			3			41			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1473			1426			502			301	
Travel Time (s)		33.5			32.4			11.4			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	11	393	31	47	333	8	43	49	41	7	47	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	424	0	47	341	0	43	90	0	7	55	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

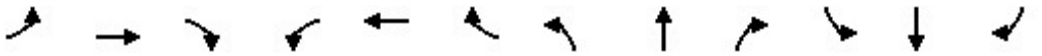
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		22.6	22.6		22.6	22.6	
Total Split (s)	22.0	22.0		22.0	22.0		23.0	23.0		23.0	23.0	
Total Split (%)	48.9%	48.9%		48.9%	48.9%		51.1%	51.1%		51.1%	51.1%	
Maximum Green (s)	17.5	17.5		17.5	17.5		18.4	18.4		18.4	18.4	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.3	1.3		1.3	1.3		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-0.5	-0.5		-0.5	-0.5		-0.6	-0.6		-0.6	-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	35.9	35.9		35.9	35.9		7.0	7.0		7.0	7.0	
Actuated g/C Ratio	0.80	0.80		0.80	0.80		0.16	0.16		0.16	0.16	
v/c Ratio	0.01	0.29		0.06	0.23		0.18	0.30		0.03	0.19	
Control Delay	1.8	2.0		1.3	1.4		18.1	13.5		16.0	16.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	1.8	2.0		1.3	1.4		18.1	13.5		16.0	16.3	
LOS	A	A		A	A		B	B		B	B	
Approach Delay		2.0			1.4			15.0			16.2	
Approach LOS		A			A			B			B	

Intersection Summary

Area Type: Other
Cycle Length: 45
Actuated Cycle Length: 45
Offset: 35 (78%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.30
Intersection Signal Delay: 4.3 Intersection LOS: A
Intersection Capacity Utilization 52.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 58: Gevers St & Houston St





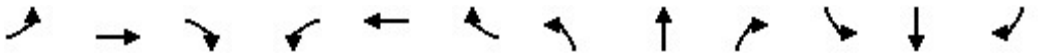
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	211	27	13	194	67	13	292	19	99	429	53
Future Volume (vph)	59	211	27	13	194	67	13	292	19	99	429	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	0.99		0.98	0.99		0.99	1.00		0.98	0.99	
Frt		0.983			0.961			0.991			0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1820	0	1770	1766	0	1770	1840	0	1770	1820	0
Flt Permitted	0.452			0.491			0.228			0.438		
Satd. Flow (perm)	825	1820	0	895	1766	0	421	1840	0	802	1820	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			52			8			15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1426			1545			543			299	
Travel Time (s)		32.4			35.1			12.3			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	79	282	36	17	259	90	17	390	25	132	574	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	318	0	17	349	0	17	415	0	132	645	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.7	14.7		14.7	14.7		14.8	14.8		14.8	14.8	
Total Split (s)	25.0	25.0		25.0	25.0		20.0	20.0		20.0	20.0	
Total Split (%)	55.6%	55.6%		55.6%	55.6%		44.4%	44.4%		44.4%	44.4%	
Maximum Green (s)	20.3	20.3		20.3	20.3		15.2	15.2		15.2	15.2	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.2	1.2		1.2	1.2	
Lost Time Adjust (s)	-0.7	-0.7		-0.7	-0.7		-0.8	-0.8		-0.8	-0.8	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	16.2	16.2		16.2	16.2		20.8	20.8		20.8	20.8	
Actuated g/C Ratio	0.36	0.36		0.36	0.36		0.46	0.46		0.46	0.46	
v/c Ratio	0.27	0.48		0.05	0.52		0.09	0.49		0.36	0.76	
Control Delay	9.7	10.0		12.1	15.3		9.0	11.0		11.8	19.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	9.7	10.0		12.1	15.3		9.0	11.0		11.8	19.5	
LOS	A	A		B	B		A	B		B	B	
Approach Delay		9.9			15.2			10.9			18.2	
Approach LOS		A			B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 5 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 14.3		Intersection LOS: B	
Intersection Capacity Utilization 80.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 59: Walters St & Houston St



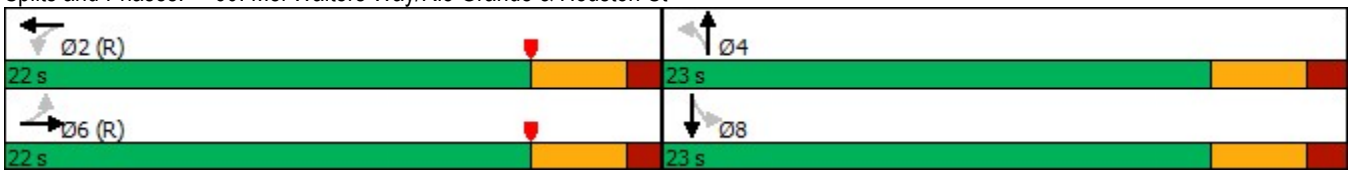


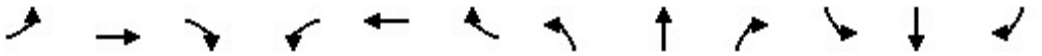
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	291	31	20	244	24	20	41	11	22	25	26
Future Volume (vph)	19	291	31	20	244	24	20	41	11	22	25	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	125		0	125		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	0.99		0.98	0.99		0.97	0.99		0.97	0.97	
Frt		0.986			0.987			0.968			0.923	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1826	0	1770	1829	0	1770	1781	0	1770	1669	0
Flt Permitted	0.547			0.512			0.889			0.889		
Satd. Flow (perm)	996	1826	0	936	1829	0	1599	1781	0	1600	1669	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			13			15			35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1545			1332			494			300	
Travel Time (s)		35.1			30.3			11.2			6.8	
Confl. Peds. (#/hr)	30		30	30		30	30		30	30		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	25	389	41	27	326	32	27	55	15	29	33	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	430	0	27	358	0	27	70	0	29	68	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		0	100		0	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		0	6		0	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	21.4	21.4		21.4	21.4		22.6	22.6		22.6	22.6	
Total Split (s)	22.0	22.0		22.0	22.0		23.0	23.0		23.0	23.0	
Total Split (%)	48.9%	48.9%		48.9%	48.9%		51.1%	51.1%		51.1%	51.1%	
Maximum Green (s)	17.6	17.6		17.6	17.6		18.4	18.4		18.4	18.4	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		1.4	1.4		1.4	1.4	
Lost Time Adjust (s)	-0.4	-0.4		-0.4	-0.4		-0.6	-0.6		-0.6	-0.6	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	36.0	36.0		36.0	36.0		6.9	6.9		6.9	6.9	
Actuated g/C Ratio	0.80	0.80		0.80	0.80		0.15	0.15		0.15	0.15	
v/c Ratio	0.03	0.29		0.04	0.24		0.11	0.25		0.12	0.24	
Control Delay	2.0	2.1		2.8	3.0		17.4	16.2		17.5	12.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	2.0	2.1		2.8	3.0		17.4	16.2		17.5	12.6	
LOS	A	A		A	A		B	B		B	B	
Approach Delay		2.1			3.0			16.6			14.1	
Approach LOS		A			A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 45			
Offset: 5 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay: 4.9		Intersection LOS: A	
Intersection Capacity Utilization 40.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 60: Mel Waiters Way/Rio Grande & Houston St





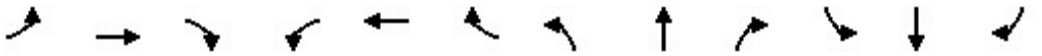
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	290	39	118	350	65	21	1	94	2	4	4
Future Volume (vph)	28	290	39	118	350	65	21	1	94	2	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		0	250		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982			0.976				0.850		0.948	
Flt Protected	0.950			0.950				0.954			0.989	
Satd. Flow (prot)	1770	3476	0	1770	3454	0	0	1777	1583	0	1746	0
Flt Permitted	0.417			0.497							0.912	
Satd. Flow (perm)	777	3476	0	926	3454	0	0	1863	1583	0	1610	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			28				157		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1094			1140			730			346	
Travel Time (s)		24.9			25.9			16.6			7.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%
Adj. Flow (vph)	37	388	52	158	468	87	28	1	126	3	5	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	440	0	158	555	0	0	29	126	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	2	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Thru	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	100	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	6	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94	94		94	
Detector 2 Size(ft)		6			6			6	6		6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0	0.0		0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA	Free	Perm	NA	
Protected Phases	1	6			2			4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	6			2			4		Free	8		
Detector Phase	1	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	7.2	27.1		15.1	15.1		29.2	29.2		29.2	29.2	
Total Split (s)	20.0	50.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	25.0%	62.5%		37.5%	37.5%		37.5%	37.5%		37.5%	37.5%	
Maximum Green (s)	15.8	44.9		24.9	24.9		24.8	24.8		24.8	24.8	
Yellow Time (s)	3.0	3.9		3.9	3.9		3.2	3.2		3.2	3.2	
All-Red Time (s)	1.2	1.2		1.2	1.2		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-0.2	-1.1		-1.1	-1.1			-1.2			-1.2	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	0.5	1.5		1.5	1.5		1.0	1.0		1.0	1.0	
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)		7.0					7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0					17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)		0					0	0		0	0	
Act Effct Green (s)	71.2	73.6		68.3	68.3			7.5	80.0		7.5	
Actuated g/C Ratio	0.89	0.92		0.85	0.85			0.09	1.00		0.09	
v/c Ratio	0.05	0.14		0.20	0.19			0.17	0.08		0.08	
Control Delay	1.4	1.0		3.6	2.5			35.6	0.1		28.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	1.4	1.0		3.6	2.5			35.6	0.1		28.1	
LOS	A	A		A	A			D	A		C	
Approach Delay		1.0			2.7			6.7			28.1	
Approach LOS		A			A			A			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 10 (13%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.20			
Intersection Signal Delay: 2.8		Intersection LOS: A	
Intersection Capacity Utilization 35.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 61: Coca-Cola Pl & Houston St



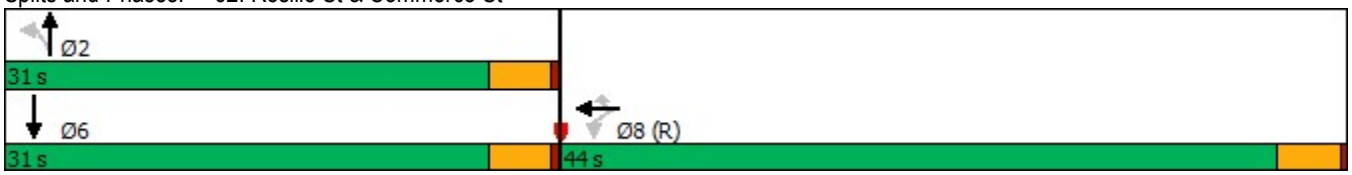


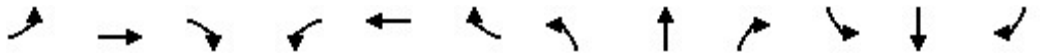
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	18	1041	157	14	24	0	0	45	278
Future Volume (vph)	0	0	0	18	1041	157	14	24	0	0	45	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850					0.884	
Flt Protected					0.999			0.982				
Satd. Flow (prot)	0	0	0	0	3536	1583	0	1829	0	0	1647	0
Flt Permitted					0.999			0.791				
Satd. Flow (perm)	0	0	0	0	3536	1583	0	1473	0	0	1647	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						195					42	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		398			349			391			184	
Travel Time (s)		9.0			7.9			8.9			4.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	0	0	0	22	1290	195	17	30	0	0	56	344
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1312	195	0	47	0	0	400	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	
Detector Template				Left	Thru	Right	Left	Thru			Thru	
Leading Detector (ft)				20	100	20	20	100			100	
Trailing Detector (ft)				0	0	0	0	0			0	
Detector 1 Position(ft)				0	0	0	0	0			0	
Detector 1 Size(ft)				20	6	20	20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA			NA	
Protected Phases					8			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases				8		8	2					
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Minimum Split (s)				20.0	20.0	20.0	20.0	20.0			20.0	
Total Split (s)				44.0	44.0	44.0	31.0	31.0			31.0	
Total Split (%)				58.7%	58.7%	58.7%	41.3%	41.3%			41.3%	
Maximum Green (s)				40.0	40.0	40.0	27.0	27.0			27.0	
Yellow Time (s)				3.5	3.5	3.5	3.5	3.5			3.5	
All-Red Time (s)				0.5	0.5	0.5	0.5	0.5			0.5	
Lost Time Adjust (s)					0.0	0.0		0.0			0.0	
Total Lost Time (s)					4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				C-Max	C-Max	C-Max	None	None			None	
Walk Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Flash Dont Walk (s)				11.0	11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)					45.6	45.6		21.4			21.4	
Actuated g/C Ratio					0.61	0.61		0.29			0.29	
v/c Ratio					0.61	0.19		0.11			0.80	
Control Delay					11.7	1.9		18.2			34.2	
Queue Delay					2.0	0.0		0.0			0.0	
Total Delay					13.8	1.9		18.2			34.2	
LOS					B	A		B			C	
Approach Delay					12.2			18.2			34.2	
Approach LOS					B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 33 (44%), Referenced to phase 8:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 62.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 62: Rosillo St & Commerce St



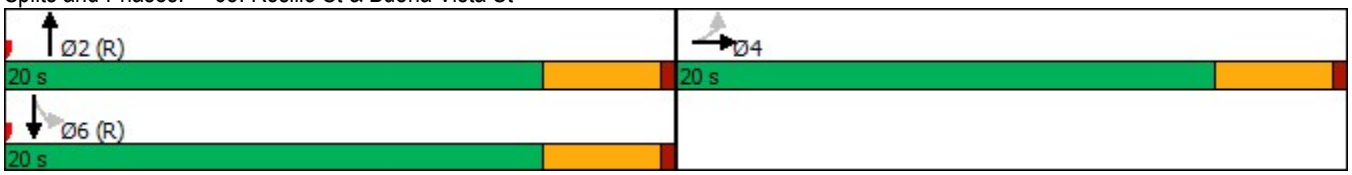


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	489	18	0	0	0	0	15	7	29	34	0
Future Volume (vph)	27	489	18	0	0	0	0	15	7	29	34	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995						0.957				
Flt Protected	0.950										0.977	
Satd. Flow (prot)	1770	1853	0	0	0	0	0	1783	0	0	1820	0
Flt Permitted	0.950										0.898	
Satd. Flow (perm)	1770	1853	0	0	0	0	0	1783	0	0	1673	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5						9				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		402			351			304			391	
Travel Time (s)		9.1			8.0			6.9			8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	33	606	22	0	0	0	0	19	9	36	42	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	628	0	0	0	0	0	28	0	0	78	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4									6		
Minimum Split (s)	20.0	20.0						20.0		20.0	20.0	
Total Split (s)	20.0	20.0						20.0		20.0	20.0	
Total Split (%)	50.0%	50.0%						50.0%		50.0%	50.0%	
Maximum Green (s)	16.0	16.0						16.0		16.0	16.0	
Yellow Time (s)	3.5	3.5						3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5						0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0						0.0			0.0	
Total Lost Time (s)	4.0	4.0						4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0						5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0						11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0						0		0	0	
Act Effct Green (s)	16.0	16.0						16.0			16.0	
Actuated g/C Ratio	0.40	0.40						0.40			0.40	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.05	0.84						0.04			0.12	
Control Delay	7.7	25.4						6.3			8.2	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay	7.7	25.4						6.3			8.2	
LOS	A	C						A			A	
Approach Delay		24.5						6.3			8.2	
Approach LOS		C						A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 40			
Actuated Cycle Length: 40			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 22.2		Intersection LOS: C	
Intersection Capacity Utilization 47.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 63: Rosillo St & Buena Vista St



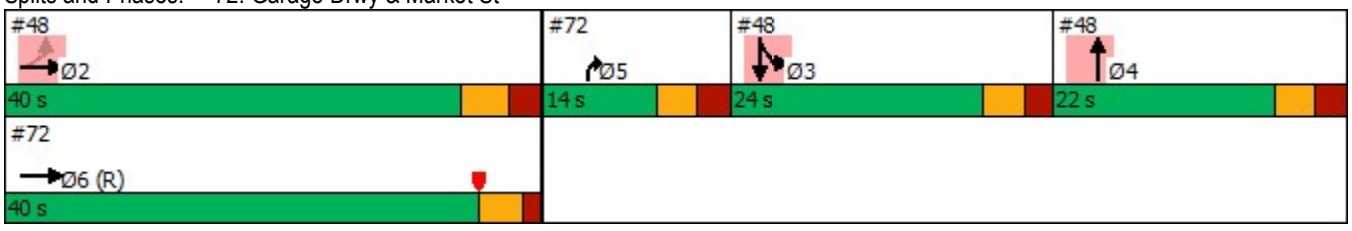


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø3	Ø4
Lane Configurations									
Traffic Volume (vph)	0	0	0	0	0	0			
Future Volume (vph)	0	0	0	0	0	0			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Lane Util. Factor	0.91	1.00	1.00	1.00	1.00	1.00			
Frt									
Flt Protected									
Satd. Flow (prot)	5085	0	0	0	0	1863			
Flt Permitted									
Satd. Flow (perm)	5085	0	0	0	0	1863			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)									
Link Speed (mph)	30			30	30				
Link Distance (ft)	195			622	242				
Travel Time (s)	4.4			14.1	5.5				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Growth Factor	114%	114%	114%	114%	114%	114%			
Adj. Flow (vph)	0	0	0	0	0	0			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	0	0	0	0	0	0			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	0			0	0				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)		9	15		15	9			
Number of Detectors	2					1			
Detector Template	Thru					Right			
Leading Detector (ft)	100					20			
Trailing Detector (ft)	0					0			
Detector 1 Position(ft)	0					0			
Detector 1 Size(ft)	6					20			
Detector 1 Type	Cl+Ex					Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0					0.0			
Detector 1 Queue (s)	0.0					0.0			
Detector 1 Delay (s)	0.0					0.0			
Detector 2 Position(ft)	94								
Detector 2 Size(ft)	6								
Detector 2 Type	Cl+Ex								
Detector 2 Channel									
Detector 2 Extend (s)	0.0								
Turn Type						Prot			
Protected Phases	6					5	2	3	4
Permitted Phases									
Detector Phase	6					5			
Switch Phase									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2	Ø3	Ø4
Minimum Initial (s)	10.0					5.0	5.0	5.0	5.0
Minimum Split (s)	25.0					12.0	12.0	22.0	12.0
Total Split (s)	40.0					14.0	40.0	24.0	22.0
Total Split (%)	40.0%					14.0%	40%	24%	22%
Maximum Green (s)	35.3					8.5	34.0	18.7	16.5
Yellow Time (s)	3.2					3.0	3.5	3.2	3.0
All-Red Time (s)	1.5					2.5	2.5	2.1	2.5
Lost Time Adjust (s)	0.0					0.0			
Total Lost Time (s)	4.7					5.5			
Lead/Lag						Lead		Lag	
Lead-Lag Optimize?						Yes		Yes	
Vehicle Extension (s)	1.0					3.0	3.0	1.0	3.0
Recall Mode	C-Min					None	Max	None	Max
Act Effct Green (s)									
Actuated g/C Ratio									
v/c Ratio									
Control Delay									
Queue Delay									
Total Delay									
LOS									
Approach Delay									
Approach LOS									

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 18 (18%), Referenced to phase 6:EBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 0.0		Intersection LOS: A	
Intersection Capacity Utilization 0.0%		ICU Level of Service A	
Analysis Period (min) 15			

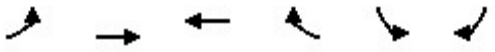
Splits and Phases: 72: Garage Drwy & Market St





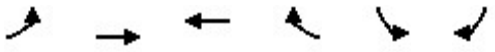
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	791	16	0	1064	0	68
Future Volume (vph)	791	16	0	1064	0	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	1857	0	0	1863	0	1611
Flt Permitted						
Satd. Flow (perm)	1857	0	0	1863	0	1611
Link Speed (mph)	30			30	30	
Link Distance (ft)	124			198	227	
Travel Time (s)	2.8			4.5	5.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	980	20	0	1318	0	84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1000	0	0	1318	0	84
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 67.2%		ICU Level of Service C	
Analysis Period (min) 15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	859	1056	68	0	8
Future Volume (vph)	0	859	1056	68	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.992			0.865
Flt Protected						
Satd. Flow (prot)	0	1863	1848	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	1863	1848	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		198	280		263	
Travel Time (s)		4.5	6.4		6.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	0	1064	1309	84	0	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1064	1393	0	0	10
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 78.1%		ICU Level of Service D	
Analysis Period (min) 15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	731	1074	31	0	25
Future Volume (vph)	0	731	1074	31	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.996			0.865
Flt Protected						
Satd. Flow (prot)	0	1863	1855	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	1863	1855	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		282	181		220	
Travel Time (s)		6.4	4.1		5.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	0	906	1331	38	0	31
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	906	1369	0	0	31
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 76.6%		ICU Level of Service D	
Analysis Period (min) 15			

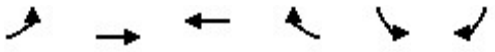


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	714	17	0	1105	0	31
Future Volume (vph)	714	17	0	1105	0	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	1857	0	0	1863	0	1611
Flt Permitted						
Satd. Flow (perm)	1857	0	0	1863	0	1611
Link Speed (mph)	30			30	30	
Link Distance (ft)	181			335	254	
Travel Time (s)	4.1			7.6	5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	885	21	0	1369	0	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	906	0	0	1369	0	38
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 69.6%		ICU Level of Service C	
Analysis Period (min) 15			

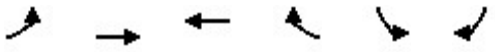
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	763	36	0	1028	0	50
Future Volume (vph)	763	36	0	1028	0	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.994					0.865
Flt Protected						
Satd. Flow (prot)	1852	0	0	1863	0	1611
Flt Permitted						
Satd. Flow (perm)	1852	0	0	1863	0	1611
Link Speed (mph)	30			30	30	
Link Distance (ft)	552			476	424	
Travel Time (s)	12.5			10.8	9.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	945	45	0	1274	0	62
Shared Lane Traffic (%)						
Lane Group Flow (vph)	990	0	0	1274	0	62
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 65.0%		ICU Level of Service C	
Analysis Period (min) 15			



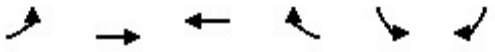
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	813	1010	25	0	18
Future Volume (vph)	0	813	1010	25	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997			0.865
Flt Protected						
Satd. Flow (prot)	0	1863	1857	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	1863	1857	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		476	331		369	
Travel Time (s)		10.8	7.5		8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	0	1007	1252	31	0	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1007	1283	0	0	22
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 72.3%		ICU Level of Service C	
Analysis Period (min) 15			



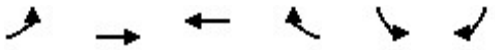
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	813	1017	25	0	18
Future Volume (vph)	0	813	1017	25	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997			0.865
Flt Protected						
Satd. Flow (prot)	0	1863	1857	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	1863	1857	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		331	372		357	
Travel Time (s)		7.5	8.5		8.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	0	1007	1260	31	0	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1007	1291	0	0	22
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 72.7%		ICU Level of Service C	
Analysis Period (min) 15			

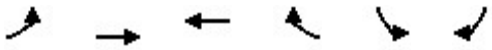


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	571	1090	0	0	15
Future Volume (vph)	0	571	1090	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	1863	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	1863	1863	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		314	149		331	
Travel Time (s)		7.1	3.4		7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	0	708	1351	0	0	19
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	708	1351	0	0	19
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 75.4%		ICU Level of Service D	
Analysis Period (min) 15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	5085	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	5085	0	0	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						
Link Speed (mph)		30	30		30	
Link Distance (ft)		396	412		423	
Travel Time (s)		9.0	9.4		9.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	114%	114%	114%	114%	114%	114%
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type						
Protected Phases			8			
Permitted Phases						
Minimum Split (s)			20.0			
Total Split (s)			20.0			
Total Split (%)			100.0%			
Maximum Green (s)			16.0			
Yellow Time (s)			3.5			
All-Red Time (s)			0.5			
Lost Time Adjust (s)			0.0			
Total Lost Time (s)			4.0			
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)			5.0			
Flash Dont Walk (s)			11.0			
Pedestrian Calls (#/hr)			0			
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Delay						
LOS						
Approach Delay						
Approach LOS						

Intersection Summary			
Area Type:	Other		
Cycle Length: 20			
Actuated Cycle Length: 20			
Offset: 0 (0%), Referenced to phase 2: and 6:, Start of Green			
Natural Cycle: 40			
Control Type: Pretimed			
Maximum v/c Ratio: 0.00			
Intersection Signal Delay: 0.0		Intersection LOS: A	
Intersection Capacity Utilization 0.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 123: Commerce St & Camaron St



Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	556	0	1059	0	0
Future Volume (vph)	0	556	0	1059	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865				
Flt Protected						
Satd. Flow (prot)	0	1611	0	1863	0	0
Flt Permitted						
Satd. Flow (perm)	0	1611	0	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	149			1217	1130	
Travel Time (s)	3.4			27.7	25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	604	0	1151	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	604	0	1151	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 59.1%		ICU Level of Service B	
Analysis Period (min) 15			



QUESTIONS?

To learn more about this project and download materials, visit **KeepSAmoving.com**.

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